

Appendix D

Work Schedule Milestones and Target Dates Including Designation of Lead Regulatory Agency

NOTES:

Major Milestones are indicated by a -00 suffix (example, M-021-00).

Interim Milestones are indicated by a suffix greater than zero (example, M-022-02).

A target date is indicated by a "T" (example, M-021-02-T01).

See Section 2.0 of this Action Plan for more details.

Milestones and target dates which are completed or have been deleted by an approved Tri-Party Agreement change request, are not displayed in Appendix D and have been archived.

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Appendix D

Work Schedule Milestones and Target Dates Including Designation of Lead Regulatory Agency

Number	Milestone	Due Date
M-015-00 Lead Regulatory Agency: Dual	Complete the RI/FS (or RFI/CMS and RI/FS) process for all non-tank farm operable units except for canyon/associated past practice waste site OUs covered in M-85-00.	06/30/2026
M-015-38B Lead Regulatory Agency: EPA	Submit a Feasibility Study Report and Proposed Plan(s) for the 200-CW-1, 200-CW-3, and 200-OA-1 Operable Units for Waste Sites in the Outer Area of the Central Plateau to EPA.	07/31/2023
M-015-84 Lead Regulatory Agency: EPA	Complete remedial investigation of 200-WA-1 and 200-BC-1 operable unit waste sites in accordance with the 200-WA-1 and 200-BC-1 RI/FS Work Plan.	12/31/2021
M-015-91B Lead Regulatory Agency: EPA	Submit Feasibility Study Report(s) and Proposed Plan(s) for the 200-BC-1 and 200-WA-1 operable units (200 West Inner Area) to EPA.	07/31/2023
M-015-92B Lead Regulatory Agency: Ecology	Submit RCRA Facility Investigation/Corrective Measures Study & Remedial Investigation/Feasibility Study Report and Proposed Corrective Action Decision/Proposed Plan for the 200-EA-1 OU (Central Plateau 200 East Inner Area) to Ecology.	11/30/2022
M-015-92C Lead Regulatory Agency: Ecology	Submit RCRA Facility Investigation/Corrective Measures Study & Remedial Investigation/Feasibility Study Report and Proposed Corrective Action Decision/Proposed Plan for the 200-IS-1 OU to Ecology.	03/31/2023
M-015-93B Lead Regulatory Agency: Ecology	Submit RCRA Facility Investigation/Corrective Measures Study & Remedial Investigation/Feasibility Study Report and Proposed Corrective Action Decision/Proposed Plan for the 200-SW-2 OU to Ecology.	01/31/2023
M-015-93C Lead Regulatory Agency: Ecology	Initiate characterization field work for the 200-SW-2 Operable Unit landfills in accordance with the schedule in the approved RI/FS/RFI/CMS Work Plan.	09/30/2018
M-015-98 Lead Regulatory Agency: EPA	Complete remedial investigation of U Plant related waste sites located in 200-WA-1 in accordance with the WA-1 RI/FS Work Plan	06/30/2019
M-015-99 Lead Regulatory Agency: EPA	Complete remedial investigation of PFP related waste sites located in 200-WA-1 in accordance with the 200-WA-1 and 200-BC-1 RI/FS Work Plan.	12/31/2019
M-015-110B Lead Regulatory Agency: Ecology	Submit Corrective Measures Study & Feasibility Study Report and Proposed Plan/Proposed Corrective Action Decision for the 200-DV-1 OU to Ecology.	09/30/2023
M-015-112 Lead Regulatory Agency: Ecology	Submit Draft B, <i>200-IS-1 Operable Unit Pipeline System Waste Sites RFI/CMS/RI/FS Work Plan</i> to Ecology, including a schedule of completion dates for major tasks and deliverables.	11/30/2020

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M-016-00 Lead Regulatory Agency: Dual	Complete remedial actions for all non-tank farm and non-canyon operable units in accordance with schedules established in approved RD/RA work plans. Note: See operable unit LRA designation listing in Appendix C. 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.	09/30/2042
M-016-00C Lead Regulatory Agency: EPA	Complete all response actions for the 100 K Area.	09/30/2024
M-016-85 Lead Regulatory Agency: EPA	Complete remedial actions for the 300-296 waste site in accordance with RD/RA Work Plan for 300-FF-2 Soils (DOE/RL-2014-13-ADD1) and disposition for the 324 Building and Ancillary Buildings in accordance with the Removal Action Work Plan (DOE/RL-2004-77). Completion of facility disposition is defined as the completion of deactivation, decontamination, decommissioning, and demolition in accordance with the removal action work plan.	11/30/2030
M-016-85A Lead Regulatory Agency: EPA	Complete remote excavation of the 300-296 waste site in accordance with an approved RD/RA Work Plan.	11/30/2025
M-016-86 Lead Regulatory Agency: EPA	Complete remedial actions for 618-11 Burial Ground in accordance with RD/RA Work Plan for 300-FF-2 Soils (DOE/RL-2014-13-ADD1).	To Be Determined In Accordance With Milestone M-016-89
M-016-87A Lead Regulatory Agency: EPA	Submit an annual evaluation of results of enhanced groundwater monitoring near the 618-11 Burial Ground. If the evaluation indicates that interim actions are warranted to ensure protection of human health and the environment, DOE will recommend interim actions commensurate with the enhanced monitoring results. This milestone will continue on an annual basis and will be discontinued through joint EPA/DOE agreement via an approved change control form to delete this milestone.	06/30/2024 And Annually Thereafter
M-016-87B Lead Regulatory Agency: EPA	Submit an annual evaluation of results of enhanced groundwater monitoring near the 618-11 Burial Ground. If the evaluation indicates that interim actions are warranted to ensure protection of human health and the environment, DOE will recommend interim actions commensurate with the enhanced monitoring results. This milestone will continue on an annual basis and will be discontinued through joint EPA/DOE agreement via an approved change control form to delete this milestone.	06/30/2025 And Annually Thereafter

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M-016-87C Lead Regulatory Agency: EPA	<p>Submit an annual evaluation of results of enhanced groundwater monitoring near the 618-11 Burial Ground. If the evaluation indicates that interim actions are warranted to ensure protection of human health and the environment, DOE will recommend interim actions commensurate with the enhanced monitoring results.</p> <p>This milestone will continue on an annual basis and will be discontinued through joint EPA/DOE agreement via an approved change control form to delete this milestone.</p>	<p>06/30/2026</p> <p>And Annually Thereafter</p>
M-016-87-T02 Lead Regulatory Agency: EPA	<p>Submit to EPA the final Sampling and Analysis Plan (SAP), if changes (e.g., target analytes, sample frequency, etc.) are needed to satisfy the DQOs.</p> <p>Update the 618-11 conceptual site model and create the vadose zone model to be updated with the enhanced monitoring data. Submit to EPA the associated Environmental Calculation Files.</p> <p>Submit interim action alternative analysis to EPA for reducing infiltration at 618-11.</p>	<p>12/31/2022</p>
M-016-87-T03 Lead Regulatory Agency: EPA	<p>Complete well implementation around 618-11, if needed to satisfy the DQOs.</p>	<p>06/30/2023</p>
M-016-88 Lead Regulatory Agency: EPA	<p>Initiate remediation planning, as well as coordination with Energy Northwest for remediation of the 618-11 Burial Ground.</p> <p>Remedial planning will take into account the results of the enhanced groundwater monitoring.</p>	<p>09/30/2025</p>
M-016-88-T01 Lead Regulatory Agency: EPA	<p>Submit to EPA for review, a preliminary design (e.g., preliminary drawings, preliminary specifications, design criteria/basis of design, preliminary schedule, etc.) for remediation of the 618-11 Burial Ground.</p>	<p>09/30/2026</p>
M-016-88-T02 Lead Regulatory Agency: EPA	<p>Submit to EPA for review, an intermediate design (e.g., intermediate drawings, specifications, schedule, etc.) for remediation of the 618-11 Burial Ground.</p>	<p>09/30/2027</p>
M-016-89 Lead Regulatory Agency: EPA	<p>Submit to EPA the Remedial Design/Remedial Action Work Plan with updated schedule for remediating the 618-11 Burial Ground.</p>	<p>09/30/2028</p>
M-016-90 Lead Regulatory Agency: EPA	<p>Initiate remediation of the 618-11 Burial Ground.</p>	<p>09/30/2030</p>
M-016-143 Lead Regulatory Agency: EPA	<p>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.</p>	<p>09/30/2024</p>

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M-016-173 Lead Regulatory Agency: EPA	Select K Basin sludge treatment and packaging technology and propose new interim sludge treatment and packaging milestones.	09/30/2022
M-016-181 Lead Regulatory Agency: EPA	Complete deactivation, demolition & removal of 105-KW Fuel Storage Basin.	09/30/2023
M-016-186 Lead Regulatory Agency: EPA	Initiate soil remediation under 105-KW Fuel Storage Basin.	12/31/2023
M-016-200A Lead Regulatory Agency: EPA	Complete U Plant canyon (221 U Facility) demolition in accordance with the Remedial Design/Remedial Action Work Plan.	09/30/2024
M-016-200B Lead Regulatory Agency: EPA	Complete U Plant (221 U Facility) barrier construction in accordance with the Remedial Design/Remedial Action Work Plan.	09/30/2027
M-024-000 Lead Regulatory Agency: Ecology	Complete required well installations in accordance with the RCRA and CERCLA groundwater requirements. The M-24 Milestone Series will be closed when the Parties agree that sufficient RCRA and CERCLA groundwater wells are in place and operating to comply with RCRA and CERCLA requirements for groundwater monitoring, groundwater protection, and groundwater remediation.	To Be Determined
M-024-58P Lead Regulatory Agency: Ecology	<p>Initiate discussions of well commitments to reaffirm the selected wells and recommend any new well installations needed to maintain a three-year rolling prioritized drilling schedule consistent with site-wide clean-up priorities.</p> <p>The following text applies to all M-024 well construction milestones.</p> <p>Since all wells are drilled in CERCLA or RCRA past practice Operable Units, the parties agreed that the most effective and efficient method of managing wastes from all Hanford well development drilling would be to dispose of the waste in the Hanford environmental restoration disposal facility (ERDF). This workscope would be conducted under the M-024 series milestones.</p> <p>The integration and coordination of all well drilling under the revised Tri-Party Agreement M-024 milestone series will assure CERCLA needs are incorporated into the overall drilling campaign. In addition, the parties reaffirmed their commitment to Section 5.5 of the Tri-Party Agreement Action Plan, the need to coordinate the application of regulatory requirements, and that past-practice authority may provide the most efficient means for addressing mixed-waste groundwater contamination plumes originating from a combination of TSD and past-practice units.</p>	06/01/2023 And Annually Thereafter

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	<p>In order to ensure that TSD units within the operable units are brought into compliance with RCRA and state hazardous waste regulations, the State of Washington Department of Ecology (Ecology) intends, subject to part four of the Tri-Party Agreement, that all response or corrective actions, excluding situations where there is an imminent threat to the public health or environment as described in Section 7.2.3, will be conducted in a manner which ensures compliance with the technical requirements of the Hazardous Waste Management Act (HWMA) Chapter 70.105 RCW and implementing regulations. Notwithstanding this operating assumption, Ecology reserves the right to exercise its authority under the HWMA and the Hanford Sitewide RCRA Permit, Condition II.Y to require groundwater response actions consistent with WAC 173-303-645 and/or 173-303-646. The management of purgewater and investigation derived wastes from existing wells and wells under the M-024 Tri-Party Agreement milestones (including treatment, storage, and disposal unit wells), will be managed as CERCLA wastes in accordance with a CERCLA decision document, sampling and analysis plan, or waste control plan. Non-liquids will be disposed at ERDF as long as the wastes meet ERDF disposal acceptance criteria. Purgewater will be stored and/or treated at the 200 Area Effluent Treatment Facility or the 600 Area Purgewater Storage and Treatment Facility, unless the lead regulatory agency approves a discharge request for return to the environment.</p> <p>(This milestone series will continue on a yearly basis until such time that the Parties agree that sufficient RCRA and CERCLA groundwater wells are in place and operating to comply with RCRA and CERCLA requirements for groundwater monitoring, groundwater protection, and groundwater remediation.)</p> <p>These milestones do not preclude or foreclose the imposition of additional groundwater well installations pursuant to RCRA permits or work plans and/or CERCLA workplans. Additional work or modification to work shall be in accordance with the provisions of Article XXX of the Agreement.</p>	
<p>M-024-73 Lead Regulatory Agency: Ecology</p>	<p>DOE shall complete the construction of all wells listed for calendar year 2022 and before, as identified in TPA change package M-24-22-01.</p> <p>This milestone series will continue on a yearly basis until such time that the Parties agree that sufficient RCRA and CERCLA groundwater wells are in place and operating to comply with RCRA and CERCLA requirements for groundwater monitoring, groundwater protection, and groundwater remediation.</p> <p>These milestones do not preclude or foreclose the imposition of additional groundwater well installations pursuant to RCRA permits or work plans and/or CERCLA work plans. Additional work or</p>	<p>12/31/2022</p>

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	modification to work shall be in accordance with the provisions of Article XXX of the Agreement.	
M-024-74 Lead Regulatory Agency: Ecology	DOE shall complete the construction of all wells listed for calendar year 2023 and before, as identified in TPA change package M-24-22-01. This milestone series will continue on a yearly basis until such time that the Parties agree that sufficient RCRA and CERCLA groundwater wells are in place and operating to comply with RCRA and CERCLA requirements for groundwater monitoring, groundwater protection, and groundwater remediation. These milestones do not preclude or foreclose the imposition of additional groundwater well installations pursuant to RCRA permits or work plans and/or CERCLA work plans. Additional work or modification to work shall be in accordance with the provisions of Article XXX of the Agreement.	12/31/2023
M-024-74-T01 Lead Regulatory Agency: Ecology	Conclude discussions of well commitments initiated under M-024-58.	08/01/2023
M-024-75 Lead Regulatory Agency: Ecology	DOE shall complete the construction of all wells listed for calendar year 2024 and before, as identified in TPA change package M-24-22-01. This milestone series will continue on a yearly basis until such time that the Parties agree that sufficient RCRA and CERCLA groundwater wells are in place and operating to comply with RCRA and CERCLA requirements for groundwater monitoring, groundwater protection, and groundwater remediation. These milestones do not preclude or foreclose the imposition of additional groundwater well installations pursuant to RCRA permits or work plans and/or CERCLA work plans. Additional work or modification to work shall be in accordance with the provisions of Article XXX of the Agreement.	12/31/2024
M-024-75-T01 Lead Regulatory Agency: Ecology	Conclude discussions of well commitments initiated under M-024-58.	08/01/2024
M-024-76 Lead Regulatory Agency: Ecology	DOE shall complete the construction of all wells listed for calendar year 2025 and before, as identified in TPA change package M-24-22-01. This milestone series will continue on a yearly basis until such time that the Parties agree that sufficient RCRA and CERCLA groundwater wells are in place and operating to comply with RCRA and CERCLA requirements for groundwater monitoring, groundwater protection, and groundwater remediation.	12/31/2025

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	These milestones do not preclude or foreclose the imposition of additional groundwater well installations pursuant to RCRA permits or work plans and/or CERCLA work plans. Additional work or modification to work shall be in accordance with the provisions of Article XXX of the Agreement.	
M-024-76-T01 Lead Regulatory Agency: Ecology	Conclude discussions of well commitments initiated under M-024-58.	08/01/2025
M-026-01AE Lead Regulatory Agency: Ecology	<p>Submit an annual Hanford Land Disposal Restrictions (LDR) Summary Report in accordance with the Agreement requirements to cover the period from 1/1 of the previous year through 12/31 of the reporting year. The Hanford Land Disposal Restrictions Summary report will contain the following elements:</p> <ul style="list-style-type: none"> • Section 1.0 Introduction • Section 1.1 CY 20XX LDR Summary Report Overview (where XX will be the reporting year) • Section 1.2: Summary Inventory of Waste Treatment Groups and Forecast Generation Rates • Section 1.3, Potential Mixed Waste • Section 2.0: Assessments of Mixed Waste Storage Areas and Potential Mixed Waste • Section 2.1: Introduction • Section 2.2: Assessment Schedules • Section 3.0: Summary of Characterization Information • Section 4.0: Summary of Treatment Information • Section 5.0: Storage Volume and Container Numbers for Selected Storage Locations • Section 6.0: References • Table 1-1: Stored Volumes of Mixed Waste and Generation Projections • Table 1-2: Treatability Group Summary of Storage, Characterization, and Treatment Activities • Table 1-3: Explanation of Table 1-4, Potential Mixed Waste • Table 1-4: Potential Mixed Waste • Table 1-5: Historical List of Materials Deleted from Potential Mixed Waste Table • Table 2-1: Summary of DOE-RL Assessment Results • Table 2-2: DOE-RL Assessments for Calendar Years 2005 Through 2007 (updated for next three years until no assessments are scheduled) • Table 2-3: Summary of DOE-ORP Assessment Results • Table 3-1: Summary of Characterization Information for Each Treatability Group • Table 4-1: Summary of Treatment Information for Each Treatability Group 	09/30/2022 and Intervening Years Between Full Reports

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Number	Milestone	Due Date
	<ul style="list-style-type: none"> • Table 5-1: Storage Volume and Number of Containers for Selected Hanford Locations <p>Table 5-1 will contain the storage volume and the number of containers reported for the following Hanford Site locations: CWC, LLBG, WRAP, PFP, T Plant Complex, WSCF, 325 HWTU, 324, 327, 200 ETF, and 222-S.</p> <p>NOTE: The list for Table 5-1 may change periodically. The change will be made via approval of the applicable Project Managers Meeting minutes documented and approved on or before 11/30 of each year. If no changes to the list are indicated, the list will remain unchanged.</p>	
<p>M-026-01AF Lead Regulatory Agency: Ecology</p>	<p>Submit an annual Hanford Land Disposal Restrictions (LDR) Summary Report in accordance with the Agreement requirements to cover the period from 1/1 of the previous year through 12/31 of the reporting year. The Hanford Land Disposal Restrictions Summary report will contain the following elements:</p> <ul style="list-style-type: none"> • Section 1.0 Introduction • Section 1.1 CY 20XX LDR Summary Report Overview (where XX will be the reporting year) • Section 1.2: Summary Inventory of Waste Treatment Groups and Forecast Generation Rates • Section 1.3, Potential Mixed Waste • Section 2.0: Assessments of Mixed Waste Storage Areas and Potential Mixed Waste • Section 2.1: Introduction • Section 2.2: Assessment Schedules • Section 3.0: Summary of Characterization Information • Section 4.0: Summary of Treatment Information • Section 5.0: Storage Volume and Container Numbers for Selected Storage Locations • Section 6.0: References • Table 1-1: Stored Volumes of Mixed Waste and Generation Projections • Table 1-2: Treatability Group Summary of Storage, Characterization, and Treatment Activities • Table 1-3: Explanation of Table 1-4, Potential Mixed Waste • Table 1-4: Potential Mixed Waste • Table 1-5: Historical List of Materials Deleted from Potential Mixed Waste Table • Table 2-1: Summary of DOE-RL Assessment Results • Table 2-2: DOE-RL Assessments for Calendar Years 2005 Through 2007 (updated for next three years until no assessments are scheduled) 	<p>02/28/2023 and Intervening Years Between Full Reports</p>

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	<ul style="list-style-type: none"> • Table 2-3: Summary of DOE-ORP Assessment Results • Table 3-1: Summary of Characterization Information for Each Treatability Group • Table 4-1: Summary of Treatment Information for Each Treatability Group • Table 5-1: Storage Volume and Number of Containers for Selected Hanford Locations <p>Table 5-1 will contain the storage volume and the number of containers reported for the following Hanford Site locations: CWC, LLBG, WRAP, PFP, T Plant Complex, WSCF, 325 HWTU, 324, 327, 200 ETF, and 222-S.</p> <p>NOTE: The list for Table 5-1 may change periodically. The change will be made via approval of the applicable Project Managers Meeting minutes documented and approved on or before 11/30 of each year. If no changes to the list are indicated, the list will remain unchanged.</p>	

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<p>M-026-01AI Lead Regulatory Agency: Ecology</p>	<p>Submit an annual Hanford Land Disposal Restrictions Report in accordance with agreement requirements to cover the period from 1/1 of the previous year through 12/31 of the reporting year.</p> <p>DOE's annual Hanford Land Disposal Restrictions Report: 1) Will be equivalent to (i.e. shall meet all substantive requirements of) site treatment plans as required by the Federal Facility Compliance Act of 1992 (FFCA) and 2) will meet all requirements of Ecology's Final Determination in this matter dated March 29, 2000.</p> <p>The Report shall include a description of activities planned and taken in accordance with agreement requirements and prior annual LDR reports to achieve full compliance with agreement and LDR requirements. The Report shall update all information contained in the LDR plan, the Hanford LDR Summary Reports, and the prior annual LDR report, including plans and schedules.</p> <p>The format for the Report shall be based on equivalency with site treatment plan requirements of the FFCA, Ecology's final determination in this matter dated March 29, 2000, and the "Requirements for Hanford LDR Plan," issued by EPA and Ecology on April 10, 1990. Additionally, the report shall describe any other studies or effort that have been or will be undertaken to identify alternatives to land disposal of mixed wastes. The nonradioactive portion of any mixed wastes that are regulated under Washington State-only regulations shall be addressed in the Report. The Report shall be submitted as a primary document.</p> <p>The report shall document agreement major and interim Milestones for achieving compliance with LDR treatment requirements at TSD mixed waste units by: 1) Identifying and reporting progress against agreement milestones and 2) proposing the establishment of Milestones in the instance of TSD mixed wastes not yet covered under the agreement and for the modification of current HFFACO schedules as necessary to achieve compliance with LDR treatment requirements in a manner equivalent to STPS as required by the FFCA. These Milestones shall be based on significant events identified in the LDR Report (i.e. schedules equivalent to those of site treatment plans as required by the FFCA) and will be shown as schedules which are updated annually as part of the Report. Appropriate Milestones will be incorporated in the agreement via the change process defined in Section 12 of the Action Plan upon issuance of the approved Reports.</p>	<p>4/30/2025 and Every Five Years Thereafter</p>
<p>M-026-07E Lead Regulatory Agency: Dual</p>	<p>Submit to EPA and Ecology an evaluation of development status of tritium treatment technology that would be pertinent to the cleanup and management of Tritiated Waste Water (e.g., the 242-A Evaporator Process Condensate Liquid Effluent) and tritium contaminated groundwater at the Hanford site.</p>	<p>03/31/2027 and Every Five Years Thereafter</p>

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M-026-07F Lead Regulatory Agency: Dual	Submit to EPA and Ecology an evaluation of development status of tritium treatment technology that would be pertinent to the cleanup and management of Tritiated Waste Water (e.g., the 242-A Evaporator Process Condensate Liquid Effluent) and tritium contaminated groundwater at the Hanford site.	03/31/2032 and Every Five Years Thereafter
M-035-00 Lead Regulatory Agency: Dual	Complete data management enhancements as negotiated and approved in M-35-00 interim milestones.	To Be Determined
M-035-09L Lead Regulatory Agency: Dual	Conduct biennial assessments of information and data access needs with EPA and Ecology. DOE will propose implementation schedules (TPA Milestones) for enhancements as a result of the biennial assessments. 3/31/98 (and biennially thereafter).	03/31/2020
M-035-09M Lead Regulatory Agency: Dual	Conduct biennial assessments of information and data access needs with EPA and Ecology. DOE will propose implementation schedules (TPA Milestones) for enhancements as a result of the biennial assessments. 3/31/98 (and biennially thereafter).	04/30/2023
M-036-01K Lead Regulatory Agency: Dual (Subsequent Annual Milestones to be Lettered B, C, D, etc.)	<p>The USDOE shall prepare and submit to EPA and Ecology a report setting out the Lifecycle Scope, Schedule and Cost for completion of the Hanford Site Cleanup Mission. The report shall reflect all of those actions necessary for the USDOE to fully meet all applicable Environmental obligations including those under the HFFACO, the Consent Decree in Washington v. DOE, Case No. 08-5085-FVS, and the Hanford RCRA/HWMA Permit. The report shall include scope, schedule and cost for completing work at each of the operable units and RCRA TSD groups/units that are listed in Appendixes B and C of the HFFACO, in the Consent Decree in Washington v. DOE, Case TPA No. 08-5085-FVS, and in the Hanford RCRA/HWMA Permit, including the Hanford Waste Treatment and Immobilization Plant. The report will include all other cleanup and monitoring activities (including post-closure activities) and all related actions necessary to complete the cleanup mission to provide a complete understanding of the resources necessary for the Hanford cleanup mission.</p> <p>This report shall take into account circumstances existing as of the end of the fiscal year preceding the month of the report, including funds appropriated by Congress for the Hanford cleanup, but shall not assume any limitation on funding for future years. However, the report will take into consideration critical resource availability not based upon assumed future funding limitations and the practical limits of project acceleration when developing an executable plan. USDOE may also include costs other than those directly related to environmental obligations (such as security costs) but shall clearly distinguish expenditures for environmental obligations from other expenditures. Costs shall be displayed by program baseline summary. Additional levels of detail will appear in appendixes to the</p>	01/31/2025 Due Date To Submit The Report To Be January 31 and Every 3 Years Thereafter

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	<p>report. Cost information will provide sufficient detail to validate consistency with the scope and schedule for individual cleanup projects. Reporting in the appendixes will typically be one level below the PBS for the lifecycle, and at levels below that for the next two to five years beyond the execution year (usually at the activity level within the budget assigned to a specific project, e.g., RI-0011, WBS Element 011.04.01, nuclear material stabilization and disposition - PFP, disposition PFP, transition 234-5Z). EPA and Ecology project managers may request additional levels of detail be provided by their DOE counterparts.</p> <p>In circumstances where final cleanup decisions have not yet been made, the report shall be based upon the reasonable upper bound of the range of plausible alternatives or may set forth a range of alternative costs including such a reasonable upper bound. In making assumptions for the purpose of preparing the initial report, USDOE shall take into account the views of EPA and Ecology and shall also take into account the values expressed by the affected Tribal governments and Hanford stakeholders regarding workscope, priorities and schedule. The report shall include the scope, schedule and costs for each such</p> <p>PBS level two element and shall set forth the bases and assumptions for each cleanup activity.</p> <p>After USDOE submits the report, the USDOE will revise the report based upon EPA and Ecology comments to reflect a common vision of the scope, schedule and budget for the remainder of the cleanup mission. If the agencies are unable to reach resolution on specific aspects of the scope of cleanup actions, the revised document will present a range of potential actions with the associated schedule and budget, thereby completing the milestone. DOE, EPA and Ecology shall attempt to reach agreement on the report so it can serve as an agreed upon foundation for preparing budget requests and for informational briefings of affected Tribal governments and Hanford stakeholders. The report shall also serve as the basis for annual discussions among USDOE, EPA and Ecology on how and when the USDOE will complete cleanup, how Congressional appropriations for the Hanford site for that year may affect assumptions presented in the report, and how milestone changes and adjustments will affect lifecycle scope, schedule and cost.</p> <p>Without limiting any DOE obligation under any other provisions of this agreement, and without limiting any DOE obligation to disclose information that is otherwise publicly available, nothing in this milestone shall be construed, either alone or in combination with any other provision of the HFFACO, to require disclosures related to internal federal budget deliberations.</p>	

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<p>M-037-20 Lead Regulatory Agency: Ecology</p>	<p>If requesting the use of alternative requirements for closure of the 216-A-29 Ditch, 216-A-36B Crib, 216-A-37-1 Crib, and/or 216-B-63 Trench under WAC 173-303-610(1)(e), DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4). The CC Proposal shall be submitted to Ecology at the same time as the Proposed Corrective Action Decision/Proposed Plan for the 200-EA-1 OU is submitted to Ecology pursuant to M-015-92B.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include the following information:</p> <ol style="list-style-type: none"> 1. Justification for the use of alternative requirements as required by WAC 173-303-610(1)(e)(i)–(ii); 2. Identification of which closure requirements are proposed to be replaced with alternative requirements and description of the alternative requirements that would apply, to the extent such information is available, as required by WAC 173-303-610(3)(a)(ix); and 3. Explanation of how closure of the TSD unit(s) using the proposed alternative requirements will comply with the closure performance standard set forth in WAC 173-303-610(2)(a), as required by WAC 173-303-610(3)(a)(i). 	<p>Submit concurrently with M-015-92B</p>
<p>M-037-21 Lead Regulatory Agency: Ecology</p>	<p>DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4) for the following TSD Units: 216-A-29 Ditch, 216-A-36B Crib, 216-A-37-1 Crib, and 216-B-63 Trench. The CC Proposal shall be submitted to Ecology within 270 days of the last CAD/ROD signature for the 200-EA-1 OU.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include all outstanding closure information required by WAC 173-303-610(3)(a)(i)–(vii) and, as applicable, all outstanding post-closure information required by WAC 173-303-610(8)(b). If the use of alternative requirements has been requested for closure of any of these TSD Units under WAC 173-303-610(1)(e), the CC Proposal shall also include all outstanding information required by WAC 173-303-610(3)(a)(ix).</p> <p>If a CC Proposal has not been developed by the “no later than” date in this milestone due date, then a closure plan shall be due on that date. DOE reserves the right to submit a change control form to request modification of this milestone deadline, in accordance with the procedures in Section 12 of the TPA Action Plan, in</p>	<p>Within 270 days of the last CAD/ROD signature for the 200-EA-1 OU but no later than 9/30/2034</p>

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Number	Milestone	Due Date
	<p>conjunction with DOE's every-three-years proposals pursuant to the Adaptive Milestone Approach described in IAMIT Determination 2021-002. Ecology reserves the right to disapprove such a change control form if good cause for the requested extension is not established.</p>	
<p>M-037-22 Lead Regulatory Agency: Ecology</p>	<p>If requesting the use of alternative requirements for closure of the 216-B-3 Main Pond system and/or 216-S-10 Pond and Ditch under WAC 173-303-610(1)(e), DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4). The CC Proposal shall be submitted to Ecology at the same time as the Proposed Plan for the 200-OA-1 OU is submitted to EPA pursuant to M-015-38B.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include the following information:</p> <ol style="list-style-type: none"> 1. Justification for the use of alternative requirements as required by WAC 173-303-610(1)(e)(i)–(ii); 2. Identification of which closure requirements are proposed to be replaced with alternative requirements and description of the alternative requirements that would apply, to the extent such information is available, as required by WAC 173-303-610(3)(a)(ix); and 3. Explanation of how closure of the TSD unit(s) using the proposed alternative requirements will comply with the closure performance standard set forth in WAC 173-303-610(2)(a), as required by WAC 173-303-610(3)(a)(i). 	<p>Submit concurrently with M-015-38B</p>
<p>M-037-23 Lead Regulatory Agency: Ecology</p>	<p>DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4) for the following TSD Units: 216-B-3 Main Pond system and 216-S-10 Pond and Ditch. The CC Proposal shall be submitted to Ecology within 270 days of the last ROD signature for the 200-OA-1 OU.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include all outstanding closure information required by WAC 173-303-610(3)(a)(i)–(vii) and, as applicable, all outstanding post-closure information required by WAC 173-303-610(8)(b). If the use of alternative requirements has been requested for closure of any of these TSD Units under WAC 173-303-610(1)(e), the CC Proposal shall also include all outstanding information required by WAC 173-303-610(3)(a)(ix).</p> <p>If a CC Proposal has not been developed by the “no later than”</p>	<p>Within 270 days of the last ROD signature for the 200-OA-1 OU but no later than 9/30/2034</p>

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Number	Milestone	Due Date
	<p>date in this milestone due date, then a closure plan shall be due on that date. DOE reserves the right to submit a change control form to request modification of this milestone deadline, in accordance with the procedures in Section 12 of the TPA Action Plan, in conjunction with DOE's every-three-years proposals pursuant to the Adaptive Milestone Approach described in IAMIT Determination 2021-002. Ecology reserves the right to disapprove such a change control form if good cause for the requested extension is not established.</p>	
<p>M-037-24 Lead Regulatory Agency: Ecology</p>	<p>DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4) for the following TSD Units: 241-CX Tank System (CX-70, CX-71, and CX-72) and Inactive SST Components outside the WMAs. The CC Proposal shall be submitted to Ecology within 270 days of the last CAD/ROD signature for the 200-IS-1 OU.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include all outstanding closure information required by WAC 173-303-610(3)(a)(i)–(vii) and, as applicable, all outstanding post-closure information required by WAC 173-303-610(8)(b). If the use of alternative requirements has been requested for closure of any of these TSD Units under WAC 173-303-610(1)(e), the CC Proposal shall also include all outstanding information required by WAC 173-303-610(3)(a)(ix).</p> <p>If a CC Proposal has not been developed by the “no later than” date in this milestone due date, then a closure plan shall be due on that date. DOE reserves the right to submit a change control form to request modification of this milestone deadline, in accordance with the procedures in Section 12 of the TPA Action Plan, in conjunction with DOE's every-three-years proposals pursuant to the Adaptive Milestone Approach described in IAMIT Determination 2021-002. Ecology reserves the right to disapprove such a change control form if good cause for the requested extension is not established.</p>	<p>Within 270 days of the last CAD/ROD signature for the 200-IS-1 OU but no later than 9/30/2034</p>

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Number	Milestone	Due Date
<p>M-037-25 Lead Regulatory Agency: Ecology</p>	<p>If requesting the use of alternative requirements for closure of the Inactive SST Components Outside the WMAs under WAC 173-303-610(1)(e), DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4). The CC Proposal shall be submitted to Ecology at the same time as the Proposed Corrective Action Decision/Proposed Plan for the 200-IS-1 OU is submitted to Ecology pursuant to M-015-92C.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include the following information:</p> <ol style="list-style-type: none"> 1. Justification for the use of alternative requirements as required by WAC 173-303-610(1)(e)(i)–(ii); 2. Identification of which closure requirements are proposed to be replaced with alternative requirements and description of the alternative requirements that would apply, to the extent such information is available, as required by WAC 173-303-610(3)(a)(ix); and 3. Explanation of how closure of the TSD unit(s) using the proposed alternative requirements will comply with the closure performance standard set forth in WAC 173-303-610(2)(a), as required by WAC 173-303-610(3)(a)(i). 	<p>Submit concurrently with M-015-92C</p>

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Number	Milestone	Due Date
<p>M-037-26 Lead Regulatory Agency: Ecology</p>	<p>If requesting the use of alternative requirements for closure of any of the Green Island TSD units located in the Low-Level Burial Grounds under WAC 173-303-610(1)(e), DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4). The CC Proposal shall be submitted to Ecology at the same time as the Proposed Corrective Action Decision/Proposed Plan for the 200-SW-2 OU is submitted to Ecology pursuant to M-015-93B.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include the following information:</p> <ol style="list-style-type: none"> 1. Justification for the use of alternative requirements as required by WAC 173-303-610(1)(e)(i)–(ii); 2. Identification of which closure requirements are proposed to be replaced with alternative requirements and description of the alternative requirements that would apply, to the extent such information is available, as required by WAC 173-303-610(3)(a)(ix); and 3. Explanation of how closure of the TSD unit(s) using the proposed alternative requirements will comply with the closure performance standard set forth in WAC 173-303-610(2)(a), as required by WAC 173-303-610(3)(a)(i). 	<p>Submit concurrently with M-015-93B</p>
<p>M-037-27 Lead Regulatory Agency: Ecology</p>	<p>DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4) for the following TSD Units: Low-Level Burial Grounds Green Islands. The CC Proposal shall be submitted to Ecology within 270 days of the last CAD/ROD signature for the 200-SW-2 OU.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include all outstanding closure information required by WAC 173-303-610(3)(a)(i)–(vii) and, as applicable, all outstanding post-closure information required by WAC 173-303-610(8)(b). If the use of alternative requirements has been requested for closure of any of the Green Island TSD Units under WAC 173-303-610(1)(e), the CC Proposal shall also include all outstanding information required by WAC 173-303-610(3)(a)(ix).</p> <p>If a CC Proposal has not been developed by the “no later than” date in this milestone due date, then a closure plan shall be due on that date. DOE reserves the right to submit a change control form to request modification of this milestone deadline, in accordance with the procedures in Section 12 of the TPA Action Plan, in</p>	<p>Within 270 days of the last CAD/ROD signature for the 200-SW-2 OU but no later than 9/30/2034</p>

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Number	Milestone	Due Date
	<p>conjunction with DOE's every-three-years proposals pursuant to the Adaptive Milestone Approach described in IAMIT Determination 2021-002. Ecology reserves the right to disapprove such a change control form if good cause for the requested extension is not established.</p>	
<p>M-037-28 Lead Regulatory Agency: Ecology</p>	<p>DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4) for all TSD Units in the 221-B Canyon Facility. The CC Proposal shall be submitted to Ecology within 270 days of the last CAD/ROD signature for the 200-CB-1 OU.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include all outstanding closure information required by WAC 173-303-610(3)(a)(i)-(vii) and, as applicable, all outstanding post-closure information required by WAC 173-303-610(8)(b). If the use of alternative requirements has been requested for closure of any of these TSD Units under WAC 173-303-610(1)(e), the CC Proposal shall also include all outstanding information required by WAC 173-303-610(3)(a)(ix).</p> <p>If a CC Proposal has not been developed by the "no later than" date in this milestone due date, then a closure plan shall be due on that date. DOE reserves the right to submit a change control form to request modification of this milestone deadline, in accordance with the procedures in Section 12 of the TPA Action Plan, in conjunction with DOE's every-three-years proposals pursuant to the Adaptive Milestone Approach described in IAMIT Determination 2021-002. Ecology reserves the right to disapprove such a change control form if good cause for the requested extension is not established.</p>	<p>Within 270 days of the last CAD/ROD signature for the 200-CB-1 OU but no later than 9/30/2034</p>
<p>M-037-29 Lead Regulatory Agency: Ecology</p>	<p>DOE shall submit a Coordinated Closure (CC) Proposal as a permit modification request pursuant to WAC 173-303-830(4) for the following TSD Units: PUREX Tunnels 1 and 2 and all TSD Units in the PUREX Canyon Facility. The CC Proposal shall be submitted to Ecology within 270 days of the last CAD/ROD signature for the 200-CP-1 OU.</p> <p>The CC Proposal shall be prepared in accordance with the process described in TPA Action Plan Section 5.5 and include all outstanding closure information required by WAC 173-303-610(3)(a)(i)-(vii) and, as applicable, all outstanding post-closure information required by WAC 173-303-610(8)(b). If the use of alternative requirements has been requested for closure of any of these TSD Units under WAC 173-303-610(1)(e), the CC Proposal shall also include all outstanding information required by WAC 173-303-610(3)(a)(ix).</p>	<p>Within 270 days of the last CAD/ROD signature for the 200-CP-1 OU but no later than 9/30/2034</p>

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Number	Milestone	Due Date
	<p>If a CC Proposal has not been developed by the “no later than” date in this milestone due date, then a closure plan shall be due on that date. DOE reserves the right to submit a change control form to request modification of this milestone deadline, in accordance with the procedures in Section 12 of the TPA Action Plan, in conjunction with DOE’s every-three-years proposals pursuant to the Adaptive Milestone Approach described in IAMIT Determination 2021-002. Ecology reserves the right to disapprove such a change control form if good cause for the requested extension is not established.</p>	
<p>M-042-00A Lead Regulatory Agency: Ecology</p>	<p>Complete the closure of all DST Tank Farms.</p>	<p>TBD, Based Upon Completion of Retrieval Under M-62-45 Plus 5 Years But No Later Than 09/30/2052</p>

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Number	Milestone	Due Date																																										
M-042-10 Lead Regulatory Agency: Ecology	Complete a leak test, internal inspection, or other tank integrity examination of the following DST System-associated Slurry/Supernate Transfer Lines and Drain/Pump Pits (DST components) to assess the applicable tank system's integrity in accordance with 40 CFR § 265.191 and WAC 173-303-640(2), as applicable.	12/31/2026																																										
	<table border="1"> <thead> <tr> <th data-bbox="412 506 638 642">Tank System</th> <th data-bbox="638 506 911 642">Slurry and Supernate Transfer lines</th> <th data-bbox="911 506 1195 642">Drain/Pump Pits</th> </tr> </thead> <tbody> <tr> <td data-bbox="412 642 638 705">241-AN-101</td> <td data-bbox="638 642 911 705">None</td> <td data-bbox="911 642 1195 705">241-AN-01D</td> </tr> <tr> <td data-bbox="412 705 638 768">241-AN-102</td> <td data-bbox="638 705 911 768">SL-162, SN-262</td> <td data-bbox="911 705 1195 768">None</td> </tr> <tr> <td data-bbox="412 768 638 831">241-AN-103</td> <td data-bbox="638 768 911 831">SL-163, SN-263</td> <td data-bbox="911 768 1195 831">None</td> </tr> <tr> <td data-bbox="412 831 638 905">241-AN-104</td> <td data-bbox="638 831 911 905">SL-164, SN-264, SLL-3160</td> <td data-bbox="911 831 1195 905">None</td> </tr> <tr> <td data-bbox="412 905 638 968">241-AN-105</td> <td data-bbox="638 905 911 968">SL-165, SN-265</td> <td data-bbox="911 905 1195 968">None</td> </tr> <tr> <td data-bbox="412 968 638 1031">241-AN-107</td> <td data-bbox="638 968 911 1031">SL-167, SN-267</td> <td data-bbox="911 968 1195 1031">None</td> </tr> <tr> <td data-bbox="412 1031 638 1094">241-AW-105</td> <td data-bbox="638 1031 911 1094">SL-165</td> <td data-bbox="911 1031 1195 1094">None</td> </tr> <tr> <td data-bbox="412 1094 638 1157">241-SY-101</td> <td data-bbox="638 1094 911 1157">None</td> <td data-bbox="911 1094 1195 1157">241-SY-01A</td> </tr> <tr> <td data-bbox="412 1157 638 1220">241-SY-102</td> <td data-bbox="638 1157 911 1220">None</td> <td data-bbox="911 1157 1195 1220">241-SY-02E</td> </tr> <tr> <td data-bbox="412 1220 638 1367">241-AY-101</td> <td data-bbox="638 1220 911 1367">None</td> <td data-bbox="911 1220 1195 1367">241-AY-01B, 241-AY-01C, 241-AY-01D, 241-AY-01E</td> </tr> <tr> <td data-bbox="412 1367 638 1430">241-AZ-101</td> <td data-bbox="638 1367 911 1430">None</td> <td data-bbox="911 1367 1195 1430">241-AZ-01B, 241-AZ-01C</td> </tr> <tr> <td data-bbox="412 1430 638 1493">241-AZ-102</td> <td data-bbox="638 1430 911 1493">None</td> <td data-bbox="911 1430 1195 1493">241-AZ-02B, 241-AZ-02C</td> </tr> <tr> <td data-bbox="412 1493 638 1610">AW-A and 242-A Evaporator</td> <td data-bbox="638 1493 911 1610">SL-168</td> <td data-bbox="911 1493 1195 1610">None</td> </tr> </tbody> </table>		Tank System	Slurry and Supernate Transfer lines	Drain/Pump Pits	241-AN-101	None	241-AN-01D	241-AN-102	SL-162, SN-262	None	241-AN-103	SL-163, SN-263	None	241-AN-104	SL-164, SN-264, SLL-3160	None	241-AN-105	SL-165, SN-265	None	241-AN-107	SL-167, SN-267	None	241-AW-105	SL-165	None	241-SY-101	None	241-SY-01A	241-SY-102	None	241-SY-02E	241-AY-101	None	241-AY-01B, 241-AY-01C, 241-AY-01D, 241-AY-01E	241-AZ-101	None	241-AZ-01B, 241-AZ-01C	241-AZ-102	None	241-AZ-02B, 241-AZ-02C	AW-A and 242-A Evaporator	SL-168	None
	Tank System		Slurry and Supernate Transfer lines	Drain/Pump Pits																																								
	241-AN-101		None	241-AN-01D																																								
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	241-AN-107		SL-167, SN-267	None																																								
	241-AW-105		SL-165	None																																								
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Number	Milestone	Due Date
<p>M-045-00 Lead Regulatory Agency: Ecology</p>	<p>Complete the closure of all Single Shell Tank Farms.</p> <p>Closure will follow retrieval of as much tank waste as technically possible, with tank waste residues not to exceed 360 cubic feet (cu. ft.) In each of the 100 series tanks, 30 cu. ft. In each of the 200 series tanks, or the limit of waste retrieval technology capability, whichever is less. If the DOE believes that waste retrieval to these levels is not possible for a tank, then DOE will submit a detailed explanation to EPA and Ecology explaining why these levels cannot be achieved, and specifying the quantities of waste that the DOE proposes to leave in the tank. The request will be approved or disapproved by EPA and Ecology on a tank-by-tank, or group of tanks, basis. Procedures for modifying the retrieval criteria listed above and for processing requests for exceptions to the criteria are outlined in Appendix H to the Agreement.</p> <p>For the purposes of this Agreement all units located within the boundary of each tank farm will be closed in accordance with WAC 173-303-610. This includes contaminated soil and ancillary equipment that were previously designated as RCRA past practice units. Adopting this approach will ensure efficient use of funding and will reduce potential duplication of effort via application of different regulatory requirements: WAC 173-303-610 for closure of the TSD units and RCRA Section 3004(U) for remediation of RCRA past practice units.</p> <p>All Parties recognize that the reclassification of previously identified RCRA past practice units to ancillary equipment associated with the TSD unit is strictly for application of a consistent closure approach. Upgrades to previously classified RCRA past practice units to achieve compliance with RCRA or dangerous waste interim status technical standards for tank systems (i.e., secondary containment, integrity assessments, etc.) will not be mandated as a result of this action. However, any equipment modified or replaced will meet interim status standards. In evaluating closure options for Single-Shell Tanks, contaminated soil, and ancillary equipment, Ecology and EPA will consider cost, technical practicability, and potential exposure to radiation. Closure of all units within the boundary of a given tank farm will be addressed in a closure plan for the Single-Shell Tanks.</p> <p>Compliance with the work schedules set forth in this milestone series is defined as the performance of sufficient work to assure with reasonable certainty that DOE will accomplish series major and interim milestone requirements.</p> <p>DOE internal work schedules (e.g., DOE approved schedule baselines) and associated work directives and authorizations shall be consistent with the requirements of this Agreement. Modification of DOE contractor baseline(s) and issuance of associated DOE work directives and/or authorizations that are not consistent with</p>	<p>01/31/2043</p>

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Number	Milestone	Due Date
	<p>Agreement requirements shall not be finalized prior to approval of an Agreement change request submitted pursuant to Agreement Action Plan Section 12.0.</p> <p>All work under this milestone series shall be conducted in compliance with Agreement requirements including but not limited to the Parties' Agreement Appendix I, "Single-Shell Tank System Waste Retrieval and Closure Process", provided that Section 2.1, Tank Waste Retrieval, of Appendix I of the HFFACO shall not apply to the 19 SSTs covered by the Consent Decree in Washington V. DOE, CASE No. 08-5085-FVS, except as set forth in Appendix C, Part 3, A.1 and A.2 of such Decree.</p>	
<p>M-045-13 Lead Regulatory Agency: Ecology</p>	<p>Interim completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project.</p> <p>The S-112 SST Waste Retrieval and Closure Demonstration Project will be considered interim complete when the following criteria have been met:</p> <ol style="list-style-type: none"> 1. Full scale waste retrieval has been completed in accordance with applicable regulatory requirements including Washington's Hazardous Waste Management Act, requirements set by this Agreement, and the approved S-112 saltcake waste retrieval technology functions and requirements document (DOE will submit a retrieval data report pursuant to Agreement Appendix I) by December 31, 2007. 2. Complete negotiations for interim milestones for closure of S-112 (including a schedule for submittal of closure plans and risk assessments and final closure dates) in accordance with Milestones M-045-84 or M-045-85. 	<p>To Be Determined In Accordance With Milestones M-045-84 Or M-045-85</p>
<p>M-045-15 Lead Regulatory Agency: Ecology</p>	<p>Completion of Tank A-103 SST Waste Retrieval Project.</p> <p>The A-103 SST Waste Retrieval Project will be considered complete when the following criteria have been met:</p> <ol style="list-style-type: none"> 1. Full scale waste retrieval has been completed in accordance with applicable regulatory requirements including Washington's Hazardous Waste Management Act, requirements set by this Agreement, and the approved A-103 Tank Waste Retrieval Work Plan. (DOE will submit a retrieval data report pursuant to Agreement Appendix I). 2. If appropriate, DOE will submit per agreement Appendix I, a request for an exception to waste retrieval criteria pursuant to Agreement Appendix H. 	<p>09/30/2022</p>

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Number	Milestone	Due Date
M-045-56 Lead Regulatory Agency: Ecology	<p>Complete implementation of agreed-to interim measures. Specific interim measures will be implemented pursuant to Agreement commitments (e.g., see interim Milestone M-45-57). Interim measures may also be required by Ecology, proposed by DOE in the SST WMA RFI report (M-45-55) (or engineering studies including that addressed in target Milestone M-45-56-T01), or established by Agreement of the Parties at any time during the corrective action process. Also see table 1 of Agreement change control form M-45-98-03.</p> <p>Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional Agreement interim measures. Additional Agreement interim measures shall be documented through establishment of interim milestones and associated target dates as agreed necessary by the Parties.</p>	<p>To Be Determined</p>
M-045-59 Lead Regulatory Agency: Ecology	<p>Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST WMAs (pending the CMS report, Milestone M-45-58, and implementation of other interim corrective measures.</p> <p>Decisions on controlling surface water infiltration pathways will be made by evaluating the role of surface water infiltration and the transport of subsurface contamination to groundwater. Based on the corrective measures study (M-45-58) interim surface barriers and/or other infiltration controls may be required.</p>	<p>To Be Determined</p>
M-045-62 Lead Regulatory Agency: Ecology	<p>Submit to Ecology for review, in accordance with HFFACO Action Section 9.2.2, the draft Tier 3 closure plan to implement corrective measures identified in the approved Phase 2 Corrective Measures Implementation Work Plan (CMIP) for WMA C.</p>	<p>To be established in accordance with the date identified in the M-45-82 Tier 2 closure plan</p>
M-045-70 Lead Regulatory Agency: Ecology	<p>Complete waste retrieval from all remaining single-shell tanks. Retrieval standards and completion definitions are provided in milestone M-045-00.</p> <p>The schedule reflects retrieval activities on a farm-by-farm basis. It also allows flexibility to retrieve tanks from various farms if desired to support safety issue resolution, pretreatment or disposal feed requirements, or other priorities.</p>	<p>12/31/2040 Or Earlier As Established By M-062-45</p>

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Number	Milestone	Due Date
M-045-83 Lead Regulatory Agency: Ecology	Complete the Closure of WMA C by completing all closure activities specified in the Tier 2 closure plan, not including activities specifically described in the Tier 2 closure plan as requiring integration with closure of other WMA's.	To be established in accordance with the date identified in the M-45-82 Tier 2 closure plan
M-045-85 Lead Regulatory Agency: Ecology	Initiate negotiations to establish HFFACO interim milestones for closure of the remaining Single-Shell Tank (SST) WMAs (including a schedule for 200 West Area SST WMA closures, the submittal of closure plans, RCRA Phase 2 Facility Investigation/Corrective Measures Studies [RFI/CMS], Corrective Measures Implementation Plans, risk assessments and final closure dates for each SST WMA).	01/31/2022
M-045-86 Lead Regulatory Agency: Ecology	Submit a retrieval data report to Ecology for the 19 tanks retrieved under the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS, which report shall include the following elements only of Section 2.1.7 of Appendix I to the HFFACO: <ol style="list-style-type: none"> 1) Residual tank waste volume measurement, including associated calculations; 2) The results of residual tank waste characterization; 3) Retrieval technology performance documentation; 4) DOE's updated post-retrieval risk assessment; 5) Opportunities and actions being taken to refine or develop tank waste retrieval technologies, based on lessons learned and, 6) LDMM monitoring and performance results. 	12 Months After DOE Certifies To Ecology That DOE Has Completed Retrieval Of Each Tank
M-045-91E5 Lead Regulatory Agency: Ecology	DOE shall provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013.	09/30/2023
M-045-91E6 Lead Regulatory Agency: Ecology	DOE shall provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013.	09/30/2025
M-045-91K Lead Regulatory Agency: Ecology	Complete initial baseline visual inspections of all single-shell tanks in accordance with the work plan approved pursuant to M-045-91J.	09/30/2023
M-045-91K-T01 Lead Regulatory Agency: Ecology	Submit to Ecology, as a secondary document, a report evaluating and documenting the initial baseline visual inspection of all SSTs remaining to be inspected following the completion of target dates M-045-91G-T05 and M-045-91G-T06.	03/31/2024

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Number	Milestone	Due Date
M-045-91L Lead Regulatory Agency: Ecology	Obtain a written assessment, reviewed and certified by an Independent Qualified Registered Professional Engineer (IQRPE) attesting to single-shell tanks (SSTs) structural integrity for such a period as the IQRPE believes he/she can reasonably certify. The analysis supporting the certification shall be performed in accordance with the requirements in WAC 173-303-640(2) relating to structural integrity and will include a review of previously issued SST integrity assessments. IQRPE certification of SST leak integrity is not required. The IQRPE assessment shall recommend revisions to the work plan and schedule for integrity assessment activities, if necessary, for the period between the IQRPE certification (9/30/2034) and the end date of the mission.	09/30/2034
M-045-92 Lead Regulatory Agency: Ecology	Complete design and construction of barriers per the following revised schedule: For Barriers 1 through 4: <ul style="list-style-type: none"> • Complete construction of Barriers 1 and 2 (also known as the South and North Barriers) in 241-SX Farm, per Ecology-approved design and monitoring plans, and of the SX Expansion Barrier per the Ecology-approved design by 10/31/19 • Submit to Ecology Design for Barrier 3 in 241-TX Farm by 10/31/19 • Barrier 3 in 241-TX Farm Design Approved by Ecology 01/31/20 • Complete Construction of Barrier 3 in 241-TX Farm by 10/31/22 • Submit to Ecology Design for Barrier 4 in 241-U Farm by 10/31/21 • Barrier 4 Design Approved by Ecology 01/31/22 • Complete Construction of Barrier 4 in 241-U Farm by 10/31/23 • Submit for approval by Ecology a Maintenance and Performance Monitoring Plan for the Interim Barriers program, as a primary document on 10/31/19. The Maintenance and Performance Monitoring Plan will address: <ul style="list-style-type: none"> • Systematic inspections and maintenance of the interim barriers to ensure their performance over their 25-year service life. • A plan to perform systematic performance monitoring of tank farms covered with interim barriers. For each tank farm with an interim barrier, the plan will evaluate and propose, as appropriate: 	10/31/2023 Or As Indicated In the Descriptive Text Of This Milestone

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Number	Milestone	Due Date
	<ul style="list-style-type: none"> ○ In-tank monitoring (e.g., surface level and liquid observation wells), and ex-tank drywell monitoring. ○ Results of completed drywell monitoring data collection and evaluation. ○ Results of completed tank leak assessments. ● Submit yearly reports summarizing the results of maintenance and performance monitoring activities for the previous year, and research completed to evaluate new technologies. <p>The Maintenance and Performance Monitoring Plan will be updated and revised with the submittal of each interim barrier design submittal.</p> <p>Ecology will authorize construction upon approval of the final design. A day-for-day slip in completing construction of the barrier will be given for each day the Design is not approved following 3 months after submittal.</p>	
M-045-98 Lead Regulatory Agency: Ecology	Submit to Ecology as a Primary Document, a RFI/CMS work plan for WMA A/AX, including an implementation schedule in accordance with HFFACO Action Plan Section 11.6.	09/30/2022
M-045-102 Lead Regulatory Agency: Ecology	Submit to Ecology a Performance Assessment (PA) Maintenance Plan for the WMA A/AX PA.	09/30/2025
M-045-103 Lead Regulatory Agency: Ecology	Submit to Ecology a permit modification request together with the Tier 2 RCRA Closure Plan for WMA A/AX including a schedule for submitting Tier 3 closure plans.	09/30/2026
M-045-104 Lead Regulatory Agency: Ecology	Submit to Ecology as a permit modification request the post-closure plan for WMA A/AX.	09/30/2028
M-047-00 Lead Regulatory Agency: Ecology	Complete work necessary to provide facilities for management of secondary waste from the WTP (e.g., tank waste treatment facility liquid effluents). Compliance with the work schedules set forth in this M-47 series is defined as the performance of sufficient work to assure with reasonable certainty that DOE will accomplish series M-47 major and interim milestone requirements. DOE internal work schedules (i.e., DOE approved schedule baselines) and associated work directives and authorizations shall be consistent with the requirements of this Agreement. Modification of DOE contractor baseline(s) and issuance of associated DOE work directives and/or authorizations that are not consistent with Agreement requirements shall not be finalized prior to approval of an Agreement change request submitted pursuant to Agreement Action Plan Section 12.0.	The Date that the WTP Achieves Initial Plant Operations

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Number	Milestone	Due Date
<p>M-062-00 Lead Regulatory Agency: Ecology</p>	<p>Complete pretreatment processing and vitrification of Hanford High Level (HLW) and Low activity (LAW) Tank Wastes.</p> <p>Compliance with the work schedules set forth in this milestone series is defined as the performance of sufficient work to assure with reasonable certainty that DOE will accomplish series major and interim milestone requirements.</p> <p>DOE internal work schedules (e.g., DOE approved schedule baselines) and associated work directives and authorizations for this milestone series shall be consistent with the requirements of this Agreement. Modification of DOE contractor baseline(s) and issuance of associated DOE work directives and/or authorizations that are not consistent with Agreement requirements shall not be finalized prior to approval of an Agreement change request submitted pursuant to Agreement Action Plan Section 12.0.</p>	<p>12/31/2047 Or Earlier As Established By M-062-45</p>
<p>M-062-01AT And Beyond Lead Regulatory Agency: Ecology</p>	<p>Submit Semi-Annual Project Compliance Report</p> <p>DOE's manager, Office of River Protection (ORP), will submit a "<u>Project Compliance Report</u>" to Ecology semi-annually (a copy of this report will also be provided to EPA's region 10 Office of Waste and Chemicals Management). This report will document DOE compliance with Agreement requirements and shall be sequentially updated by information documenting work performed and issues encountered during the previous report period. The ORP Project Compliance Report will be provided as part of the Parties' Inter Agency Management Integration Team (IAMIT) meetings, and shall document the status of progress to date, progress made during the report period, and activities expected in the foreseeable future. The report will include but is not limited to: (1) a concise description of project accomplishments and issues including those encountered during the previous year and those expected in the near term, (2) when applicable, a description of actions initiated or otherwise taken to recover any Agreement schedule slippage, (3) a budget and cost status, (4) a statement documenting whether or not DOE and DOE's contractor(s) remain in compliance with Agreement requirements, i.e., whether or not "DOE and DOE contractor(s) have completed sufficient work to allow achievement of Agreement requirements," and (5) concise descriptions of any noncompliance. Copies of all pertinent DOE work directives and/or authorizations issued to DOE's contractor(s) shall be provided on request.</p>	<p>01/31/2023 Semi-Annually Beginning July 31, 2001</p>

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Number	Milestone	Due Date
M-062-21 Lead Regulatory Agency: Ecology	On an annual basis, submit data, whose accuracy is certified in accordance with WAC 173-303-810(13), and which demonstrates on a rolling three year average, operation of WTP, and any supplemental treatment if needed, at a rate sufficient to accomplish treatment of all Hanford tank waste in accordance with the date required by milestone M-062-00, taking into account that treatment rates are expected to vary based upon a number of factors, including the character of the waste treated, or alternatively describe plans to increase the rate beyond that previously anticipated in order to achieve treatment of all Hanford tank waste by the M-062-00 milestone date.	02/28/2023 and Annually Thereafter
M-062-31-T01 Lead Regulatory Agency: Ecology	Complete Final Design and Submit a complete RCRA Part B Permit Modification request for Enhanced WTP and/or Supplemental Vitrification Treatment Facility based on the M-062-45 decision.	12 Months After M-062-45 Item #3 Decision On Supplemental Treatment
M-062-32-T01 See * in M-062-45 Lead Regulatory Agency: Ecology	Start construction of Supplemental Vitrification Treatment Facility and/or WTP Enhancements.	36 Months After M-062-45 Item #3 Decision On Supplemental Treatment, Provided That Ecology Has Issued A Final Permit Modification At Least Twelve (12) Months Earlier
M-062-33-T01 See * in M-062-45 Lead Regulatory Agency: Ecology	Complete construction of Supplemental Treatment Vitrification Facility and/or WTP Enhancements.	72 Months After M-062-45 Item #3 Decision On Supplemental Treatment
M-062-34-T01 See * in M-062-45 Lead Regulatory Agency: Ecology	Complete Hot Commissioning of Supplemental Treatment Vitrification Facility and/or WTP Enhancements.	92 Months After M-062-45 Item #3 Decision On Supplemental Treatment
M-062-40 Lead Regulatory Agency: Ecology	Submit a System Plan to Ecology describing the disposition of all tank waste managed by the Office of River Protection, including the retrieval of all tanks not addressed by the Consent Decree in	Starting October 31, 2010 and Every Three Years Thereafter, Ecology and DOE Will Each

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	<p><i>Washington v. DOE</i>, Case No. 08-5085-FVS, and the completion of the treatment mission.</p> <p>The Plan will be updated and submitted to Ecology every three years to document any further optimization of retrieval and waste treatment capabilities to, in the case of SST retrievals, complete such retrievals as quickly as is technically feasible (but not later than the date established in milestone M-045-70), and, in the case of tank waste treatment, complete such treatment as quickly as is technically feasible (but not later than the date established in milestone M-062-00), both with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission.</p> <p>One year prior to the issuance of the System Plan, DOE and Ecology will each select the scenarios (including underlying common and scenario-specific assumptions) that will be analyzed in the System Plan, with DOE and Ecology each having the right to select a minimum of three scenarios each.</p> <p>Note: Per TPA Change Request M-62-13-02, Selection of Scenarios due on October 31, 2013 is deferred to December 15, 2013.</p> <p>The Plan will include the following elements:</p> <p><u>OVERALL MINIMUM REQUIREMENTS</u></p> <p>The Plan will present the following minimum information for each scenario evaluated:</p> <ul style="list-style-type: none"> • A system description for each system utilized in the planning • Planning bases for each case • A description of key issues, assumptions, and vulnerabilities for each scenario evaluated; a description of how such issues, assumptions and vulnerabilities are addressed in the evaluation. • Sensitivities analysis of selected key assumptions • Estimated schedule impacts of alternative cases relative to the baseline, including cost comparisons for a limited subset of scenarios that DOE and Ecology wish to analyze further. • Identification of new equipment, technology, or actions needed for the scenario (e.g., new evaporators or DSTs; new retrieval technologies; waste treatment enhancements or mitigations, such as sodium, sulfate, aluminum and chrome mitigation measures). • Identification of issues, techniques or technologies that need to be further evaluated or addressed in order to accelerate tank retrievals and tank waste treatment • Impacts on closure activities for each scenario. 	<p>Have The Right To Select A Minimum of Three Scenarios That Will Be Analyzed In The System Plan. Beginning October 31, 2011, and Every Three Years Thereafter, Issue The System Plan</p>
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Number	Milestone	Due Date
	<p><u>TANK WASTE TREATMENT</u></p> <p>The Plan will evaluate scenarios and identify potential near and long-term actions to optimize tank waste treatment so that the treatment mission is completed as quickly as is technically feasible but not later than the date established in Milestone M-062-00, with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission.</p> <p>The Plan will, at a minimum, describe how the tank waste treatment mission can:</p> <ul style="list-style-type: none"> • Pretreat 100% of the retrievable tank waste (at a rate sufficient to operate the HLW facility, LAW facility, and Supplemental Treatment system simultaneously at their estimated average production rates). • Vitrify 100% of the separated high-level waste stream at estimated average production rates. • Vitrify 100% of separated low-activity waste stream at estimated average production rates. • Appropriately manage secondary waste streams. <p>The Plan will take into account the results from testing of the Pretreatment Engineering Platform and other studies.</p> <p><u>SUPPLEMENTAL TREATMENT</u></p> <p>The Plan will also describe:</p> <ul style="list-style-type: none"> • How much total sodium will need to be treated. • The needed capacity for supplemental treatment to have all the tank waste treated by a date that is as quickly as is technically feasible but not later than the date established in milestone M-062-00, with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission. <p>The System Plan will outline specific options to treat all the LAW. Such options include:</p> <ul style="list-style-type: none"> • Build and operate a 2nd LAW Vitrification Facility. • Build and operate a Bulk Vitrification Facility. <p><u>TANK WASTE RETRIEVAL</u></p> <p>The Plan will evaluate scenarios and identify potential near and long-term actions to optimize tank waste retrieval so that the single-shell tank retrievals are completed as quickly as is technically</p>	

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Number	Milestone	Due Date
	<p>feasible but not later than the date established in milestone M-045-70, with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission.</p> <p>The Plan will consider:</p> <ul style="list-style-type: none"> • SST integrity information, including the SST integrity assurance review provided under milestone M-045-91 and any further integrity assessments. • Waste retrieval rate sufficient to operate all waste treatment facilities at their full capacities, considering optimized waste feed rates. • The effect on waste retrieval rates of the waste retrieval technologies selected through the TWRWP process. • Sequences for remaining SSTs and DSTs to be retrieved based on a risk prioritization strategy, waste treatment feed optimization as affected by blending, and Waste Management Waste Area Closure considerations. <p>The Plan will also take into account the results from previous waste retrievals and other waste treatment studies. This shall include:</p> <ul style="list-style-type: none"> • The retrieval methodologies that could be employed and estimated waste volumes to be generated for transfer to the DST or other safe storage. • DST space evaluations for the waste retrieval sequence. • Proposed improvements to reduce waste retrieval durations <p><u>CONTINGENCY PLANNING</u></p> <p>The Plan will identify and consider possible contingency measures to address the following risks:</p> <ul style="list-style-type: none"> • Results from SST integrity evaluations. • If retrievals take longer than originally anticipated and there is potential impact to the schedule for retrieving specified tanks under this agreement. • If DST space is not sufficient or is not available to support continued retrievals on schedule. • If any portion of the WTP does not initiate cold commissioning on schedule. • If any portion of the WTP does not complete hot start on schedule. • If operation of the WTP does not meet treatment rates that are adequate to complete retrievals under the schedule in this agreement. For example, the contingency measures will address estimated pretreatment facility throughput as 	

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Number	Milestone	Due Date
	<p>affected by ultrafiltration capacity and oxidative leaching requirements.</p> <p>The contingency measures identified for consideration should include, but not be limited to, providing new, compliant tanks with sufficient capacity and in sufficient time to complete retrievals under this agreement, regardless of WTP operational deficiencies or retrieval conditions.</p>	
<p>M-062-45 Lead Regulatory Agency: Ecology</p>	<p>Every six years, within six months of the issuance of the last revision of the System Plan, the parties will negotiate the following:</p> <ol style="list-style-type: none"> 1. Commencing as target milestones in 2015 and enforceable milestones in 2021 and each negotiation thereafter, tank waste retrieval sequencing and milestones, and milestones for installation of infrastructure to feed tank waste from the DST system to the tank waste treatment system, for the next eight years. 2. Contingency actions and milestones, if and as necessary, for providing new, compliant tanks with sufficient capacity and in sufficient time to complete retrievals under this agreement, regardless of WTP operational deficiencies or retrieval conditions. 3. Supplemental treatment selection (a one time selection to be made not later than April 30, 2015) and milestones, which must be consistent with M-062-00 as established by M-062-45 item #5. A 2nd LAW Vitrification Facility must be considered as one of the options. *Milestones M-062-31-T01 through M-062-34-T01 are initially set as target dates and will be established (as may be modified) as interim milestones when they are converted to interim milestones in accordance with applicable HFFACO procedures at the conclusion of this negotiation. 4. The date in milestone M-045-70 for completion of the tank waste retrievals as expeditiously as possible. 5. The date in milestone M-062-00 for completion of tank waste treatment as expeditiously as possible. 6. Milestones for the provision of IHLW canister storage capacity for the six year period of WTP operation for the operating period that begins in January 2022. Additional milestones for the provision of such canister capacity will be established as needed every six years thereafter for the storage of IHLW for the subsequent six year period of WTP operations. 	<p>04/30/2021 and Every Six Years Thereafter</p>

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Number	Milestone	Due Date
	<p data-bbox="461 296 1203 390">7. Reevaluate milestones to establish facilities to manage secondary waste streams from the WTP by the date that the WTP achieves initial plant operations.</p> <p data-bbox="412 411 1219 705">As used in paragraphs 4 and 5, above, the phrase 'as expeditiously as possible' means, in the case of SST retrievals, completing such retrievals as quickly as is technically feasible but not later than the date established in milestone M-045-70, and in the case of tank waste treatment, completing such treatment as quickly as is technically feasible but not later than the date established in milestone M-062-00, and in each case without excessive difficulty or expense within the context of such activities, and in consideration of any impact on the overall cleanup mission.</p> <p data-bbox="412 726 1211 1020">By the milestone due date, the parties will complete negotiations on the above matters. Although multiple scenarios may be considered in the course of the negotiations, and none may be considered wholly appropriate, the final decisions in items 1 through 7 above will be consistent with a single scenario, including any agreed-upon supplemental sensitivity analyses. The parties agree that the chosen scenario alone need not dictate matters in the negotiations and that other information may be considered as the parties deem appropriate.</p> <p data-bbox="412 1041 1219 1167">In the event Ecology and DOE do not reach agreement for the matters in M-062-45 paragraphs 1, 2, 3, 6, and 7 the dispute between Ecology and DOE will be resolved pursuant to the HFFACO Article VIII.</p> <p data-bbox="412 1188 1219 1524">The dispute resolution process in HFFACO, Article VIII, does not apply to the determinations in M-062-45 paragraphs 4 and 5. Rather, these disputes shall be governed by the Consent Decree in <i>Washington v. DOE, Case No. 08-5085-FVS</i>. No later than 12/31/2021, the United States and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45 paragraphs 4 and 5. The United States and Ecology have reserved their rights regarding the mechanism that should apply to such future disputes, in the event that they cannot reach agreement.</p>	

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Number	Milestone	Due Date
M-062-51 Lead Regulatory Agency: Ecology	Achieve substantial completion of all LERF/ETF construction upgrades that are necessary to support LAW hot commissioning by 2023. The Parties agree that DOE will need to complete the following in order to meet this milestone: <ol style="list-style-type: none"> 1. By 12/31/2021 (Target Date M-062-51-T01), submit to Ecology, as a primary document for approval a Secondary Liquid Waste Disposition Work Plan. 2. By 5/15/2022 (Target Date M-062-51-T02), submit permit modification request for redesign upgrades and operations to support volumes of waste types expected. 	04/15/2023
M-062-52 Lead Regulatory Agency: Ecology	Achieve substantial completion of all Secondary Waste construction upgrades that are necessary to support LAW hot commissioning by 2023. The Parties agree that DOE will need to complete the following in order to meet this milestone: <ol style="list-style-type: none"> 1. By 12/31/2021 (Target Date M-062-52-T01), submit to Ecology, as a primary document for approval, a Secondary Solid Waste Disposition Work Plan 2. By 5/15/2022 (Target Date M-062-52-T02) submit permit modification requests for any ancillary facilities or capabilities to support treatment of secondary waste. 	06/30/2023
M-062-53 Lead Regulatory Agency: Ecology	EMF cold commissioning start The Parties agree that DOE will need to complete the following in order to meet this milestone: by 4/30/2022 (milestone M-062-53A) achieve substantial completion of EMF construction.	08/15/2023
M-062-54 Lead Regulatory Agency: Ecology	Low Activity Waste Pretreatment Capability: cold commissioning complete The Parties agree that DOE will need to complete the following in order to meet this milestone: <ol style="list-style-type: none"> 1. By 7/15/2020 (milestone M-062-54A), submit permit application for AP Tank Farm modifications and operation necessary to support TSCR 2. By 12/31/2022 (milestone M-062-54B), achieve substantial completion of Low Activity Waste Pretreatment capability construction, necessary for DFLAW initial operations. 	04/30/2023
M-062-55 Lead Regulatory Agency: Ecology	Low Activity Waste Pretreatment capability necessary to feed DFLAW; hot commissioning complete.	08/15/2023

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Number	Milestone	Due Date
M-062-56 Lead Regulatory Agency: Ecology	Submit permit application for design and construction of the Low Activity Waste Pretreatment Capability. This would be the Low Activity Waste Pretreatment Capability needed in addition to the TSCR.	12/31/2023
M-062-57 Lead Regulatory Agency: Ecology	IDF operational The Parties agree that DOE will need to complete the following in order to meet this milestone: by 6/15/2022 (milestone M-062-57A), submit permit modification to add secondary waste disposal at IDF and to make permit operational, based on a Performance Assessment and Risk Budget Tool to include Immobilized LAW and secondary waste associated with treating tank waste.	09/30/2023
M-062-60 Lead Regulatory Agency: Ecology	Submit to Ecology as a primary document, a disposition pathways evaluation for the spent ion exchange (IX) columns and associated waste media. This evaluation will consider: <ol style="list-style-type: none"> 1. Current laws and regulations that affect disposal pathways, 2. Existing and reasonably possible options for the disposal of nuclear waste, 3. Comparison of the baseline disposal scenario (i.e. vitrification at WTP) and alternative off-site disposal pathways including removal then direct disposal off-site at a deep geological repository, 4. A feasibility level evaluation of on-site/off-site facility alternatives needed to support treatment and disposal options assessed in (3), 5. Comparison of potential disposal site acceptance criteria for all reasonably possible disposal pathways, 6. Capability to vitrify the cesium media at WTP, and 7. Comparison of the baseline interim storage scenario with alternative interim storage options including shipment to a permitted treatment and storage facility off the Hanford Site. The first evaluation is due 6/30/2026 and subsequent evaluations are due every 5 years thereafter until a final date for waste media disposition is established pursuant to Milestone M-062-62.	06/30/2026 and Every Five Years Thereafter
M-062-61 Lead Regulatory Agency: Ecology	Submit an updated TSCR Closure Plan as a permit modification request that includes a detailed description of the methods to be used during closure including methods for removing, transporting, treating, storing and disposing of the spent IX columns and their waste media.	04/30/2029
M-062-62 Lead Regulatory Agency: Ecology	Complete negotiations to establish HFFACO interim and final milestones for disposition of spent IX columns and waste media.	01/31/2035

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Number	Milestone	Due Date
M-062-62-T01 Lead Regulatory Agency: Ecology	Submit to Ecology, a conceptual design report package (30% design) for a facility to either remove, prepare, and process IX waste media for HLW vitrification or to treat and prepare spent IX columns for off-site disposal.	12/30/2040
M-062-62-T02 Lead Regulatory Agency: Ecology	Submit to Ecology, a preliminary design report package (60% design) for a facility to either remove, prepare, and process IX waste media for HLW vitrification or to treat and prepare spent IX columns for off-site disposal.	06/30/2042
M-062-63 Lead Regulatory Agency: Ecology	Submit to Ecology as a permit modification request, a final design report package (90-100% design) for a facility to either remove, prepare, and process IX waste media for HLW vitrification or to treat and prepare spent IX columns for off-site disposal.	09/30/2043
M-085-00 Lead Regulatory Agency: Dual	Complete response actions for the canyon facilities/associated past practice waste sites, other Tier 1 Central Plateau facilities not covered by existing milestones, and Tier 2 Central Plateau facilities. This includes B Plant, PUREX, and REDOX canyons and associated past practice waste sites in 200-CB-1, 200-CP-1, and 200-CR-1 OUs. The milestone does not include U Plant or T Plant canyons.	TBD
M-085-01 Lead Regulatory Agency: Dual	Submit a change package to establish a date for major milestone M-085-00 consistent with schedules established in approved RD/RA work plans.	06/30/2026
M-085-70 Lead Regulatory Agency: Ecology	Submit to Ecology a Remedial Investigation/Feasibility Study Work Plan for 200-CB-1.	09/30/2019
M-085-76 Lead Regulatory Agency: Ecology	Initiate response actions for the B Plant Geographic Area in accordance with the schedule in the approved Remedial/Removal Action Work Plan developed under M-085-74.	09/30/2025
M-085-80 Lead Regulatory Agency: Ecology	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CP-1 to Ecology.	09/30/2020
M-085-84 Lead Regulatory Agency: Ecology	Initiate response actions for the PUREX Operable Unit in accordance with the schedule in the approved Remedial/Removal Action Work Plan developed under M-085-82.	09/30/2025
M-085-84A Lead Regulatory Agency: Ecology	Complete electrical and mechanical isolation of the 211A building and tank yard to support demolition of the PUREX North facilities and access to 202A for characterization and removal actions.	9/30/2022
M-085-84B Lead Regulatory Agency: Ecology	Complete demolition of PUREX ancillary facilities 203A building and tank yard, and the 205A building to support access to 202A for characterization and removal actions.	9/30/2023

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Number	Milestone	Due Date
M-085-84C Lead Regulatory Agency: Ecology	Complete infrastructure upgrades (i.e., construct roads, field support facilities, waste container survey and storage areas, and decontamination stations) to support demolition preparation as described in <i>Removal Action Work Plan for the Plutonium Uranium Extraction Complex</i> , DOE/RL-2020-04.	9/30/2024
M-085-84D Lead Regulatory Agency: Ecology	Initiate utility system isolations as described in Section 2.3 of the Removal Action Work Plan for the Plutonium Uranium Extraction Complex, DOE/RL-2020-04.	9/30/2025
M-085-86 Lead Regulatory Agency: Ecology	Submit to Ecology for approval, as a modification to the PUREX Removal Action Work Plan, a schedule including but not limited to additional white powder removal and removal of the source of the white powder.	03/30/2025
M-085-90 Lead Regulatory Agency: EPA	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CR-1 to EPA.	09/30/2026
M-089-00 Lead Regulatory Agency: Ecology	Complete closure of mixed waste units in the 324 building REC B-cell, REC D-cell, and high level vault and low level vault in accordance with the Closure Plan DOE/RL-96-73, as amended and incorporated into the permit.	TBE in accordance with M-089-06
M-090-00 Lead Regulatory Agency: Ecology	Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities as necessary for storage of the first two years of Hanford site IHLW from WTP operations. Compliance with the work schedules set forth in this M-90 series is defined as the performance of sufficient work to assure with reasonable certainty that DOE will accomplish series M-90 major and interim milestone requirements. DOE internal work schedules (e.g., DOE approved schedule baselines) and associated work directives and authorizations shall be consistent with the requirements of this Agreement. Modification of DOE contractor baseline(s) and issuance of associated DOE work directives and/or authorizations that are not consistent with Agreement requirements shall not be finalized prior to approval of an Agreement change request submitted pursuant to Agreement Action Plan Section 12.0.	The Date that the WTP Achieves Hot Start

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Number	Milestone	Due Date
<p>M-090-13 Lead Regulatory Agency: Ecology</p>	<p>Submit to Ecology, a Conceptual Design Report package (Critical Decision-1) for the Interim Hanford Storage Project (storage of the first two years of Hanford Site Immobilized High Level Waste from WTP operations) and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2).</p> <p>The Conceptual Design Report package shall include the system specification outline, preliminary drawings, the preliminary hazard analysis, preliminary cost estimate, site development plan, and preliminary schedule for the design, construction, and operation of the facility. These documents are consistent with the requirements of DOE Order 413.3B, "Program and Project Management for the Acquisition of Capital Assets."</p> <p><i>The preliminary schedule for the design, construction and operation of the facility referred to in the paragraph above shall not be enforceable.</i></p>	<p>09/30/2025</p>
<p>M-091-00 Lead Regulatory Agency: Ecology</p>	<p>Complete the treatment to Land Disposal Restriction (LDR) treatment standards for all Hanford Site <i>Resource Conservation and Recovery Act of 1976 (RCRA)</i> mixed low-level waste (MLLW) and <i>RCRA</i> transuranic mixed (TRUM) waste (in above ground storage as of June 30, 2009 and in retrievable storage).</p> <p>DOE may choose to complete certification and shipment of TRUM waste for disposal at the Waste Isolation Pilot Plant (WIPP) in lieu of LDR treatment if, as of the time of shipment, such waste is exempt from LDR treatment standards when disposed at WIPP. Notification of certification in support of shipment will be reported at least annually as part of the project manager meetings or quarterly milestone review for inclusion in the administrative record.</p> <p>Definitions</p> <p>“Certification” as used herein is defined as:</p> <ul style="list-style-type: none"> • Completion of all activities necessary for waste to be packaged such that it can meet the Waste Isolation Pilot Plant Waste Acceptance Criteria (WIPP WAC). If subsequent WIPP certification reveals the waste cannot be shipped to WIPP this waste will not count toward meeting the milestone volume requirements (and will be subtracted from meeting such requirements) until such time as it has been determined to meet WIPP WAC or; • The TRUM has been shipped to Idaho. TRUM 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, or; 	<p>09/30/2050</p>

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Number	Milestone	Due Date
	<ul style="list-style-type: none"> • The waste has been treated to meet LDR treatment standards. <p>“Contact Handled (CH)” waste is a waste container with a surface dose rate less than or equal to 200 millirem per hour.</p> <p>“MLLW” is LLW that is subject to <i>RCRA</i> or 70.105 RCW. “LLW” is defined as radioactive waste that is not spent fuel, high-level waste, TRU waste, byproduct material, or naturally occurring radioactive material.</p> <p>“Remote Handled (RH)” waste is a waste container with a surface dose rate greater than 200 millirem per hour.</p> <p>“Retrievably Stored Waste (RSW)” as used herein is defined as waste that is or was believed to meet the TRU waste criteria 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. RSW does not include waste in containers that have deteriorated to the point that they cannot be retrieved and stabilized (e.g. placed in over-packs) 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, how to move forward will be determined through the cleanup process set forth in <i>RCRA</i>, CH. 70.105 RCW, and/or the <i>Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)</i> as appropriate. Those processes may result in additional requirements for the remediation of such wastes.</p> <p>“Retrieval of CH RSW” is defined as uncovering CH wastes within DOE’s RSW trenches, removing such CH wastes from the trenches, and transferring the waste to a permitted and compliant treatment, storage or disposal unit or the Environmental Restoration and Disposal Facility (ERDF).</p> <p>“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, and transferring the waste to a permitted and compliant treatment, storage or disposal unit or the ERDF.</p> <p>“Shipment” is defined as TRUM waste containers leaving the Hanford Site, and includes waste shipped to either Idaho or the Waste Isolation Pilot Plant (WIPP), and contingent upon the waste not returning to the Hanford Site.</p> <p>“Small Containers and Large Containers” as used herein have different meanings depending on whether they are used in reference to MLLW or TRUM waste.</p>	

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Number	Milestone	Due Date
	<ul style="list-style-type: none"> • When referring to MLLW, 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 TRUM waste, small containers are 55-gallon drums or smaller containers even if over packed in 85-gallon drums, and WIPP standard waste boxes (SWB). A WIPP SWB is a 1.8 cubic meter steel container that is approximately 0.94 meters in height, 1.8 meters in length, and 1.4 meters in width and was qualified by the DOE in 1988 as meeting the U.S. Department of Transportation (DOT) requirements for specification 7A type A packaging. A large container is defined as any container that is not defined as a small container. <p>“TRUM Waste” is TRU waste that is subject to <i>RCRA</i> or 70.105 RCW.</p> <p>“TRU Waste” as used herein is defined as waste that meets the definition in Subsection (18) of Section 2 of the WIPP Land Withdrawal Act. Pub. L. 102-579.</p> <p>“200 Area Caissons” as used herein are defined as RSW in the 218-W-4B burial ground caissons Alpha-1 through Alpha-4.</p> <p>Note: To provide further clarification on how volumes should be determined in different M-091 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:</p> <ul style="list-style-type: none"> • 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 (0.208 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 stored waste). • The volume of small container CH TRUM 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. 	

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Number	Milestone	Due Date
	<ul style="list-style-type: none"><li data-bbox="461 260 1224 443">• The volume of large container CH TRUM waste and RH TRUM waste (in above ground storage as of June 30, 2009 and in retrievable storage) will be based on the pre-treatment volume of each large container CH TRUM waste as listed in Hanford's SWITS. <p data-bbox="412 478 1208 577">Note: Each requirement of these M-091 series milestones is considered a distinct work requirement independently subject to the enforcement provisions of the TPA.</p>	

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Number	Milestone	Due Date
<p>M-091-03Q Lead Regulatory Agency: Ecology</p>	<p>Submit a revision of the Hanford Site TRUM waste and MLLW Project Management Plan (PMP) to Ecology pursuant to, and in compliance with, the requirements of TPA Action Plan Section 11.5. Revisions of the PMP shall address RCRA MLLW and TRUM waste and will consider and expressly evaluate the impact on M-091 retrieval, treatment and processing capabilities that may result from retrieval, treatment and/or processing of any other TRUM waste including but not limited to offsite TRUM waste and Hanford Site TRUM waste generated after January 1, 2003.</p> <p>Annual revisions of the PMP will be submitted on June 30 every year starting in 2008 and continuing until the M-091 milestones are completed. The PMP revisions shall include:</p> <ul style="list-style-type: none"> • plans and schedules to meet all the requirements set forth in the M-091 milestone series. • as an appendix, a schedule for retrieving RSW, and for certifying and shipping CH waste to the Waste Isolation Pilot Plant, including annual shipping volumes; and • with respect to RH TRUM waste, large container TRUM waste, RH MLLW and large container MLLW, the PMP submitted yearly will specifically include at least one measurable action to be taken by DOE to acquire capabilities to manage such wastes. <p>Each revision of the M-091-03 PMP shall, upon approval by Ecology, supersede previous M-091-03 PMPs.</p> <p>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-091 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.</p> <p>PMP revisions will be submitted to Ecology for review and approval as primary documents pursuant to TPA Action Plan Section 9.2.1.</p> <p>DOE shall implement the plan as approved.</p>	<p>06/30/2023 Due Date Annually By June 30</p>

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Number	Milestone	Due Date
M-091-47-T03 Lead Regulatory Agency: Ecology	Certify or treat 280 cubic meters of TRUM waste and MLLW DOE achieves credit towards this volumetric requirement through some combination of: 1) certification of small or large container TRUM waste or 2) treatment and disposal of MLLW from small or large containers. Certification of TRUM waste and MLLW and/or treatment and disposal of MLLW in excess of the volumetric requirement of previous M-091-47 series target dates can be credited towards future M-091-47 series target dates.	09/30/2023
M-091-47-T04 Lead Regulatory Agency: Ecology	<p>Certify or treat 280 cubic meters of TRUM waste and MLLW subsequent to completing certification or treatment of the volume required by M-091-47-T01. DOE achieves credit towards this volumetric requirement through some combination of: 1) certification of small or large container TRUM waste or 2) treatment and disposal of MLLW from small or large containers. Certification of TRUM waste and MLLW and/or treatment and disposal of MLLW in excess of the volumetric requirement of previous M-091-47 series target dates can be credited towards future M-091-47 series target dates.</p> <p>Submit to Ecology a TPA change control form (in accordance with TPA Action Plan Section 12.0) to establish the next two annual target dates for certification of TRUM waste and disposal of MLLW.</p>	09/30/2024
M-091-48 Lead Regulatory Agency: Ecology	Complete the offsite shipment of all TRUM waste (in above ground storage as of June 30, 2009 and in retrievable storage).	09/30/2050

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Number	Milestone	Due Date
<p>M-091-49 Lead Regulatory Agency: Ecology</p>	<p>Complete the retrieval and designation of CH RSW in burial grounds 218-W-4B, 218-W-3A and 218-E-12B.</p> <p>a. 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 containers 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 containers 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.</p> <p>b. 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.</p> <p>Such sampling and analysis shall be in accordance with Ecology approved sampling and analysis plans (SAP). DOE will implement approved SAPs, as a requirement of this milestone, during retrieval of all RSW.</p> <p>The results of burial ground vent and substrate sampling and analysis pursuant to approved SAPs shall be submitted to Ecology quarterly in the project managers' meetings for inclusion in the administrative record. 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.</p> <p>c. Within 90 days of retrieval, DOE shall designate all CH RSW retrieved from the RSW trenches pursuant to the Washington Administrative Code (WAC) 173-303-070 through 100.</p>	<p>09/30/2039</p>
<p>M-091-49B Lead Regulatory Agency: Ecology</p>	<p>Complete the retrieval and designation of RH RSW (includes the 200 area caissons).</p>	<p>09/30/2048</p>

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Number	Milestone	Due Date
M-091-53B Lead Regulatory Agency: Ecology	Remove ten (10) additional mixed waste containers from Outside Storage Area A and/or Outside Storage Area B. Removal constitutes either: <ul style="list-style-type: none"> • Shipment of the container(s) to a TSDF for repack or disposal • Relocating the container(s) to a storage area authorized by the Hanford Facility Dangerous Waste Permit, Permit Condition 1.A, or a Temporary Authorization issued pursuant to WAC 173-303-830. 	11/30/2022
M-091-53C Lead Regulatory Agency: Ecology	Remove ten (10) additional mixed waste containers from Outside Storage Area A and/or Outside Storage Area B. Removal constitutes either: <ul style="list-style-type: none"> • Shipment of the container(s) to a TSDF for repack or disposal • Relocating the container(s) to a storage area authorized by the Hanford Facility Dangerous Waste Permit, Permit Condition 1.A, or a Temporary Authorization issued pursuant to WAC 173-303-830. 	11/30/2023
M-091-53D Lead Regulatory Agency: Ecology	Remove ten (10) additional mixed waste containers from Outside Storage Area A and/or Outside Storage Area B. Removal constitutes either: <ul style="list-style-type: none"> • Shipment of the container(s) to a TSDF for repack or disposal • Relocating the container(s) to a storage area authorized by the Hanford Facility Dangerous Waste Permit, Permit Condition 1.A, or a Temporary Authorization issued pursuant to WAC 173-303-830. 	11/30/2024
M-091-53E Lead Regulatory Agency: Ecology	Remove ten (10) additional mixed waste containers from Outside Storage Area A and/or Outside Storage Area B. Removal constitutes either: <ul style="list-style-type: none"> • Shipment of the container(s) to a TSDF for repack or disposal • Relocating the container(s) to a storage area authorized by the Hanford Facility Dangerous Waste Permit, or a Temporary Authorization issued pursuant to WAC 173-303-830. 	11/30/2025
M-091-54 Lead Regulatory Agency: Ecology	Submit to Ecology for approval, in accordance with Action Plan Section 7.2.3, an Interim Response Action (IRA) proposal (including implementation schedule) to resume RSW retrieval. The IRA proposal shall identify facilities or capabilities necessary to treat, store, and dispose of CH and RH waste including caissons.	09/30/2028
M-091-55 Lead Regulatory Agency: Ecology	Submit to Ecology, a 30 percent Conceptual Design Report package for the Facility/Capability for Contact Handled (CH) waste containers. The Conceptual Design Report package shall include the system specification outline, preliminary drawings, preliminary hazard analysis, preliminary cost estimate, site development plan, and preliminary schedule for the design, permitting, construction, and operation of the facility.	09/30/2024

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Number	Milestone	Due Date
M-091-56 Lead Regulatory Agency: Ecology	Submit to Ecology, a permit modification request to modify the Hanford Facility Dangerous Waste Permit to include the Facility and/or Capability for CH waste containers, based on the 90 percent Final Design Report package. The 90% design shall be complete as necessary to obtain bids for construction, include the system specifications, final drawings, the final hazard analysis, final cost estimate, site development plan, and final schedule for construction, and start-up of the facility.	09/30/2026
M-091-57 Lead Regulatory Agency: Ecology	Initiate CH certification activities by processing a TRUM container with results meeting the M-091-00 definition of "Certification."	09/30/2026
M-091-58 Lead Regulatory Agency: Ecology	Submit to Ecology, an engineering study of the impacts of radiological decay on the cost and schedule for retrieval, processing, certification, and shipment/disposal of all RH MLLW and RH TRUM waste (in above ground storage as of June 30, 2009 and in retrievable storage).	09/30/2024
M-091-59 Lead Regulatory Agency: Ecology	Remove all mixed waste containers from Outside Storage Areas A and B. Removal constitutes either: <ul style="list-style-type: none"> • Shipment of the container(s) to a TSDF for repack or disposal • Relocating the container(s) to a storage area authorized by the Hanford Facility Dangerous Waste Permit, or a Temporary Authorization issued pursuant to WAC 173-303-830. 	09/30/2026
M-091-60 Lead Regulatory Agency: Ecology	Initiate treatment to LDR treatment standards for MLLW and TRUM waste (in above ground storage as of June 30, 2009). DOE may choose to initiate certification and shipment of TRUM waste for disposal at WIPP in lieu of LDR treatment if, as of the time of shipment, such waste is exempt from LDR treatment standards when disposed at WIPP.	09/30/2028
M-091-61 Lead Regulatory Agency: Ecology	Complete treatment to LDR treatment standards for CH small containers of MLLW and TRUM waste (in above ground storage as of June 30, 2009). DOE will dispose of MLLW and may choose to initiate certification and shipment of TRUM waste for disposal at WIPP in lieu of LDR treatment, as of the time of shipment, such waste is exempt from LDR treatment standards when disposed at WIPP.	09/30/2040
M-091-62 Lead Regulatory Agency: Ecology	Complete treatment to LDR treatment standards for CH large containers of TRUM waste (in above ground storage as of June 30, 2009). DOE may choose to initiate certification and shipment of TRUM waste for disposal at WIPP in lieu of LDR treatment if, as of the time of shipment, such waste is exempt from LDR treatment standards when disposed at WIPP.	09/30/2045

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Number	Milestone	Due Date
M-092-00 Lead Regulatory Agency: Ecology	Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for the storage, treatment/processing, and disposal of Hanford site cesium and strontium capsules (Cs/Sr), and bulk sodium (Na).	12/31/2047 or earlier as established in M-062-00
M-092-09 Lead Regulatory Agency: Ecology	<p>Submit to Ecology, a Conceptual Design Report Package (30% design) for the sodium reaction facility/capability to convert Hanford bulk sodium to aqueous sodium hydroxide to be used in the Hanford Waste Treatment and Immobilization Plant (WTP).</p> <p>The Conceptual Design Report package shall include the Conceptual Design Report, Functional Requirements Document, Functional Design Criteria Document, preliminary drawings, DOE expectations for safety in design (or a preliminary hazard analysis report if below nuclear Hazard Category 3), preliminary cost estimate, and preliminary schedule for the design, construction, and operation of the facility.</p> <p>The preliminary schedule for the design, construction and operation of the facility referred to in the paragraphs above shall not be enforceable.</p> <p>DOE shall submit with the Conceptual Design Package a TPA Change Control Form (in accordance with TPA Action Plan Section 12.0) to replace the M-092-09-T01 target date for Preliminary Design with an enforceable interim milestone drawn from the conceptual design package schedule with allowance added to address schedule margin.</p>	12/31/2026
M-092-09-T01 Lead Regulatory Agency: Ecology	<p>Submit to Ecology, a Preliminary Design Report package (60% design) for the sodium reaction facility to convert Hanford bulk sodium to aqueous bulk sodium.</p> <p>The Preliminary Design Report package shall include the Preliminary Design Report and updated documents including: Functional Requirements Document, Functional Design Criteria Document, preliminary drawings, DOE expectations for safety in design (or a preliminary hazard analysis report if below nuclear Hazard Category 3), preliminary cost estimate, and preliminary schedule for the design, construction, and operation of the facility.</p> <p>This target date will be updated and converted to an enforceable interim milestone in accordance with the TPA Change Control Form submitted pursuant to M-092-09.</p> <p>DOE shall submit with the Preliminary Design Package a TPA Change Control Form (in accordance with TPA Action Plan Section 12.0) to replace the M-092-09-T02 target date for Final Design with</p>	06/30/2028

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Number	Milestone	Due Date
	an enforceable interim milestone drawn from the preliminary design package schedule with allowance added to address risk-informed schedule margin.	
M-092-09-T02 Lead Regulatory Agency: Ecology	<p>Submit to Ecology, a Final Design Report (90%-100%) design package for the sodium reaction facility to convert Hanford bulk sodium to aqueous bulk sodium.</p> <p>The Final Design Report package shall include the Final Design Report and updated documents including: Functional Requirements Document, Functional Design Criteria Document, final drawings, DOE expectations for safety in design (or a preliminary hazard analysis report if below nuclear Hazard Category 3), cost estimate, schedule for the design, construction, and operation of the facility, and punchlist, if needed. This target date will convert to an enforceable milestone in accordance with the TPA Change Control Form submitted pursuant to M-092-09-T01.</p>	09/30/2029
M-092-20A Lead Regulatory Agency: Ecology	<p>Submit to Ecology a disposition pathways evaluation for the cesium and strontium capsules.</p> <p>This evaluation shall consider (1) current laws and regulations that affect disposal pathways, (2) potential changes to laws and regulations, (3) existing and reasonably possible options for the disposal of nuclear waste, (4) comparison of the baseline disposal scenario (i.e. vitrification at the Waste Treatment Plan (WTP)) and alternative disposal pathways, including direct disposal at a deep geological repository, (5) comparison of potential disposal site acceptance criteria for all reasonably possible disposal pathways, (6) capability to vitrify the capsules at WTP, and (7) comparison of the baseline interim storage scenario (i.e. dry storage at Hanford) with alternative interim storage options, including shipment to a treatment and storage facility, known as a TSD, off the Hanford Site.</p> <p>First evaluation is due March 31, 2022. Subsequent evaluations are due every four years thereafter until a final date for completion of M-092-00 is established.</p>	03/31/2026 and Every Four Years Thereafter
M-092-21 Lead Regulatory Agency: Ecology	Complete the transfer of the cesium and strontium capsules from the Waste Encapsulation and Storage Facility, known as WESF, to a new, permitted, interim safe storage facility.	08/31/2025

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Number	Milestone	Due Date
<p>M-092-21-T01 Lead Regulatory Agency: Ecology</p>	<p>Submit to Ecology a Conceptual Design Report Package (30% design) for any new Hanford facility/capability necessary to implement disposal of the Cs/Sr Capsules.</p> <p>The Conceptual Design Report package shall include the Conceptual Design Report, Functional Requirements Document, Functional Design Criteria Document, preliminary drawings, DOE expectations for safety in design, preliminary cost estimate, and preliminary schedule for the design, construction, and operation of the facility/capability.</p> <p>The preliminary schedule for the design, construction and operation of the facility referred to in the paragraphs above shall not be enforceable.</p> <p>DOE shall submit with the Conceptual Design Package a TPA Change Control Form (in accordance with TPA Action Plan Section 12.0) to replace the M-092-21-T02 target date for Preliminary Design with an enforceable interim milestone drawn from the conceptual design package schedule with allowance added to address schedule margin.</p>	<p>12/30/2040</p>
<p>M-092-21-T02 Lead Regulatory Agency: Ecology</p>	<p>Submit to Ecology, a Preliminary Design Report package (60% design) for any new Hanford facility/capability necessary to implement disposal of the Cs/Sr Capsules.</p> <p>The Preliminary Design Report package shall include the Preliminary Design Report and updated documents including: Functional Requirements Document, Functional Design Criteria Document, preliminary drawings, DOE expectations for safety in design, preliminary cost estimate, and preliminary schedule for the design, construction, and operation of the facility.</p> <p>This target date will be updated and converted to an enforceable milestone in accordance with the TPA Change Control Form submitted pursuant to M-092-21-T01.</p> <p>DOE shall submit with the Preliminary Design Package a TPA Change Control Form (in accordance with TPA Action Plan Section 12.0) to replace the M-092-21-T03 target date for Final Design with an enforceable interim milestone drawn from the preliminary design package schedule with allowance added to address risk-informed schedule margin.</p>	<p>06/30/2042</p>

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Number	Milestone	Due Date
M-092-21-T03 Lead Regulatory Agency: Ecology	<p>Submit to Ecology a Final Design Report (90%-100%) design package for any new Hanford facility/capability necessary to implement disposal of the Cs/Sr Capsules.</p> <p>The Final Design Report package shall include the Final Design Report and updated documents including: Functional Requirements Document, Functional Design Criteria Document, final drawings, DOE expectations for safety in design, cost estimate, schedule for the design, construction, and operation of the facility, and punchlist, if needed.</p> <p>This target date will convert to an enforceable milestone in accordance with the TPA Change Control Form submitted pursuant to M-092-21-T02.</p>	09/30/2043
M-093-00 Lead Regulatory Agency: Dual	<p>Complete final disposition of all 100 Area Surplus Production Reactor buildings.</p> <p>100 Area Surplus Production Reactor Buildings consist of the following: 105-D, 105-DR, 105-H, and 105/109-N (Ecology lead), and 105-B, 105-C, 105-F, 105-KE, and 105-KW (EPA lead).</p>	To Be Determined
M-093-27 Lead Regulatory Agency: EPA	<p>Complete 105-KE and 105-KW Reactor Interim Safe Storage in accordance with the Removal Action Work Plan.</p>	09/30/2024
M-093-27-T02 Lead Regulatory Agency: EPA	<p>Complete preparation of the 105-KW Reactor Building for Interim Safe Storage by removing liquids and accessible hazardous and controlled materials in accordance with the Removal Action Work Plan.</p>	To Be Determined
M-093-27-T03 Lead Regulatory Agency: EPA	<p>Initiate earthwork for construction of the 105-KW Safe Storage Enclosure.</p>	To Be Determined

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