STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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January 28, 2021 21-NWP-018

Brian A. Harkins, Deputy Assistant Manager
Tank Farms Division
Office of River Protection
United States Department of Energy
PO Box 450, MSIN: H6-60
Richland, Washington 99352

Re: Waste Management Area C (WMA C) Closure Milestones

Dear Brian A. Harkins:

Enclosed are Department of Ecology's (Ecology) current proposed draft of the *Tri-Party Agreement* (TPA) milestones for the closure of WMA C. Ecology transmits these draft milestones to you by letter because:

1. Ecology and the United States Department of Energy – Office of River Protection (USDOE-ORP) have informally exchanged draft milestones for WMA C closure since 2017, without reaching a tentative agreement that could undergo public comment.
2. At the June 18, 2020, Interagency Management Integration Team (IAMIT) meeting, Ecology asked USDOE-ORP to sign an Agreement in Principle to enter negotiations regarding TPA milestones for closure of WMA C. The proposal was tracked at the five following monthly IAMIT meetings without an affirmative response by USDOE-ORP.
3. Ecology and USDOE-ORP are working on the draft Tier 2 and Tier 3 closure plans for WMA C, to prepare them for public comment on a permit modification. Washington Administrative Code (WAC) 173-303-610(3)(a)(vii) requires a schedule as part of the closure plan. "(For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all dangerous waste inventory and of **the time required to place a final cover must be included.**)" [emphasis added]

USDOE-ORP has stated to Ecology that the WMA C closure milestones should be part of the ongoing holistic negotiations related to Consent Decree and TPA milestones addressing tank waste retrieval and waste treatment. Ecology consistently disagreed with that premise, noting that closure of WMA C is independent of future Single-Shell Tank retrievals and waste treatment.

Moreover, many of these milestones must be in place in order for Ecology to authorize the closure of WMA C in *the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste* (Site-wide Permit), Revision 8C, which we understand to be a shared priority for our agencies. The enclosed series of proposed TPA milestones involves two distinct categories of requirements:

- The submission of outstanding permit application materials.
- The schedule for WMA C closure activities.

The first category of new milestones will require USDOE-ORP to submit a series of permit modification requests in order to update closure plans for WMA C. These milestones are necessary to rectify what would otherwise be deemed an incomplete permit application for the closure of WMA C pursuant to WAC 173-303-610(8) and WAC 173-303-840(b).

For example, because USDOE-ORP proposes closing WMA C as a landfill, WAC 173-303-806(4)(h)(v) requires the Part B permit application to include "detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with WAC 173-303-665(6)(a)." Based on our discussions during workshops on the Tier 2 closure plan for WMA C, Ecology understands that USDOE-ORP is not able to provide the required level of detail for the final landfill cover design at this time. Because this information is required for a complete permit application under WAC 173-303-806(4)(h)(v), the establishment of new TPA milestones for the future submission of this information is necessary for Ecology to begin processing the permit under WAC 173-303-840(1)(a).

The second category of new milestones will establish the schedule for WMA C closure activities as required by WAC 173-303-610(3)(a)(vii). If agreement cannot be reached with respect to the second category of new TPA milestones, Ecology reserves the right to include a closure schedule in the permit under WAC 173-303-830(3).

TPA Article III expresses the purposes of the TPA, and states in paragraph 15:

> "Specifically, the purposes of this Agreement are to:
>
> A. Identify TSD Units which require permits; **establish schedules to achieve compliance with interim and final status requirements and to complete DOE's Part B permit application for such Units** [emphasis added] in accordance with the Action Plan; identify TSD Units which will undergo closure; close such Units in accordance with applicable laws and regulations; require post-closure care where necessary; and coordinate closure with any inter-connected remedial action at the Hanford Site."

In accordance with that purpose, Ecology requests your written response to this draft proposal for discussion at the next IAMIT meeting on February 18, 2021.

If you have any questions or concerns, please contact me at jeff.lyon@ecy.wa.gov or (509) 372-7914.

Sincerely,

Digitally signed by Lyon, Jeffery (ECY)
Date: 2021.01.28 14:02:15 -08'00'

Jeffery J. Lyon
Tank Systems Operation & Closure Project Manager
Nuclear Waste Program

kr/aa
Enclosure

cc electronic w/enc:

David Einan, EPA
Christopher Kemp, USDOE-ORP
Rob Lobos, USDOE-RL
Brian Vance, USDOE, RL
Jon Perry, HMIS
Marcel Bergeron, WRPS
Paul Rutland, WRPS
Mason Murphy, CTUIR
Jack Bell, NPT
Rex Buck, Jr., Wanapum
Laurene Contreras, YN
ERWM Staff, YN
Susan Leckband, HAB
David Reeploeg, Hanford Communities
Max Woods, ODOE
Jim Alzheimer, Ecology
David Bowen, Ecology
Jeff Lyon, Ecology
Nina Menard, Ecology
John Price, Ecology
Kyle Rucker, Ecology
Maria Skorska, Ecology
NWP RIM Coordinators, Ecology
Environmental Portal
Hanford Administrative Record: TSD No S-2-4, SST System & Milestone M-45-00
Hanford Facility Operating Record
HMIS Correspondence Control
USDOE-ORP Correspondence Control
USDOE-RL Correspondence Control
WRPS Correspondence Control

Change Number	Federal Facility Agreement and Consent Order Change Control Form	Date
M-45-17-01		01/24/2017

Originator
Rod Lobos

Phone
376-0095

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

Change Title

Establish Closure Milestones and Target Dates per M-045-82 Series for WMA-C

Description/Justification of Change

This change control form creates 11 new interim milestones, creates six new target dates, and modifies one existing interim milestone for the closure of Waste Management Area (WMA)-C.

On September 1, 2020 USDOE provided to Ecology RPP-PLAN-63990 Rev. 00 *Tier 3 Resource Conversation Recovery Act (RCRA) Component Closure Activity Plan for the 241-C-101 through 241-C-106 Tanks*, RPP-PLAN-63246 Rev. 01 *Tier 3 Resource Conservation and Recovery Act (RCRA) Component Closure Activity Plan for the 241-C-107 through 241-C-112 Tanks*, and RPP-RPT-59390 Rev. 02 *Tier 3 Resource Conservation and Recovery Act (RCRA) Component Closure Activity Plan for 241-C-200 Series Tanks* via email. These plans are currently under review by Ecology. Following completion of the review process, USDOE will submit these closure activity plans as a Rev 8C Hanford site-wide permit modification request pursuant to WAC 173-303-830(4).

The closure approach set forth in this change control form establishes milestones and target dates to implement an incremental approach to tank closure which:

1. Allows lessons learned from one closure to be applied to the planning of the next closure,
2. Enhances overall safety by decreasing chances of worker exposure and decreasing the need for workers to work around obstructions in the tank farm,
3. Provides an opportunity to gather additional data in order to reduce uncertainty, improve assessments, and aid in the closure decision-making process for this and other tank farms,
4. Satisfies applicable closure and corrective action requirements under state law,
5. Improves the ability of the Department of Energy to establish multi-year funding requirements as needed to plan to fund and execute closure activities,
6. Demonstrates progress towards tank farm closure and allows for momentum to be gained,
7. Reduces annual costs for monitoring and maintenance, and
8. Minimizes potential issues from extended storage (e.g., tank vapors, water intrusion, liner corrosion).

These milestones and target dates are based on the assumption that Washington State Department of Ecology will incorporate each applicable closure plan into the Hanford Dangerous Waste Regulations permit two months prior to the target date to begin closure activities for a given unit.

Impact of Change

This change control form creates eleven new interim milestones, creates six new target dates, and modifies one existing interim milestone. There is no impact to major milestone M-045-00.

Affected Documents

The Hanford Federal Facility Agreement and Consent Order, as amended, and Hanford Site internal planning management, and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents, Project Management Plans).

Approvals

		Approved		Disapproved		Page 1 of 4
DOE-ORP / R.G. Hastings	Date					
N/A		Approved		Disapproved		
EPA / D.R. Einan	Date					
		Approved		Disapproved		
Ecology / A.K. Smith	Date					

Authorized Changes

Modifications to HFFACO Appendix D, “Milestones and Target Dates Including Designation of Lead Regulatory Agency,” are denoted by using ~~strikeout~~ to indicate text deletions and double underline to indicate text additions.

Number	Milestone	Due Date
M-045-82-T01 Lead Regulatory Agency: Ecology	Initiate closure activities in accordance with the approved RCRA Tier 3 Component Closure Plan for the C-200 series tanks.	04/30/2022
M-045-82-D Lead Regulatory Agency: Ecology	Complete all closure activities set forth in the approved RCRA Tier 3 Component Closure Plan for the C-200 series tanks	04/30/2023
M-045-82-T02 Lead Regulatory Agency: Ecology	Initiate closure activities in accordance with the approved RCRA Tier 3 Component Closure Plan for the C-100 series tanks, C-107 through C-112.	01/31/2024
M-045-82-G Lead Regulatory Agency: Ecology	Complete all closure activities set forth in the approved RCRA Tier 3 Component Closure Plan for the C-100 series tanks, C-107 through C-112	07/31/2025
M-045-82-T03 Lead Regulatory Agency: Ecology	Initiate closure activities in accordance with the approved RCRA Tier 3 Component Closure Plan for the C-100 series tanks, C-101 through C-106.	12/31/2025
M-045-82-I Lead Regulatory Agency: Ecology	Complete all closure activities set forth in the approved RCRA Tier 3 Component Closure Plan for the C-100 series tanks, C-101 through C-106.	06/30/2027

Number	Milestone	Due Date
M-045-82E Lead Regulatory Agency: Ecology	Submit to Ecology, the draft RCRA Tier 3 Component Closure Plan for the C-301 Catch Tank, as a permit modification request pursuant to WAC 173-303-830(4). The draft Tier 3 Component Closure Plan shall be prepared in accordance with TPA Appendix I and include all outstanding closure information required by WAC 173-303-610(3)(a).	11/30/2022
M-045-82-T04 Lead Regulatory Agency: Ecology	Initiate closure activities in accordance with the approved RCRA Tier 3 Component Closure Plan for the C-301 Catch Tank.	03/31/2027
M-045-82-L Lead Regulatory Agency: Ecology	Complete all closure activities set forth in the approved RCRA Tier 3 Component Closure Plan for the C-301 Catch Tank.	12/31/2027
M-045-82-H Lead Regulatory Agency: Ecology	Submit to Ecology, the draft RCRA Tier 3 Component Closure Plan for the CR Vault, as a permit modification request pursuant to WAC 173-303-830(4). The draft Tier 3 Component Closure Plan shall be prepared in accordance with TPA Appendix I and include all outstanding closure information required by WAC 173-303-610(3)(a).	4/30/2025
M-045-82-T05 Lead Regulatory Agency: Ecology	Initiate closure activities in accordance with the approved RCRA Tier 3 Component Closure Plan for the CR Vault.	06/30/2027
M-045-82-M Lead Regulatory Agency: Ecology	Complete all closure activities set forth in the approved RCRA Tier 3 Component Closure Plan for the CR Vault	03/31/2028

Number	Milestone	Due Date
M-045-82C Lead Regulatory Agency: Ecology	Submit to Ecology the draft RCRA Tier 3 Component Closure Plan for all remaining WMA-C ancillary equipment, as a permit modification request pursuant to WAC 173-303-830(4). The draft Tier 3 Component Closure Plan shall be prepared in accordance with TPA Appendix I and include all outstanding closure information required by WAC 173-303-610(3)(a).	04/30/2022
M-045-82F Lead Regulatory Agency: Ecology	Submit to Ecology an Engineering report that includes a Conceptual Design (30% design drawings), and Schedule for a Tier 2 landfill cover for WMA-C, as a permit modification request pursuant to WAC 173-303-830(4). The Conceptual Design shall be consistent with the requirements of WAC 173-303-665(6)(a) and the performance criteria set forth in the approved Tier 2 Closure Plan for WMA-C. The Engineering Report shall address mitigation of potential for subsidence due to the extensive network of underground pipelines at WMA C. The Engineering Report shall identify the source of borrow material necessary for construction of the barrier. The Schedule shall include dates for contracting, plan of acquisition, and transportation methods and haul routes of all materials needed to complete construction of the final barrier, including borrow material in accordance with the approved Tier 2 Closure Plan for WMA-C and Milestone M-045-83	09/30/2024
M-045-82-T06 Lead Regulatory Agency: Ecology	Initiate closure activities in accordance with the approved RCRA Tier 3 Component Closure Plan for all remaining WMA-C ancillary equipment.	10/31/2026
M-045-82-N Lead Regulatory Agency: Ecology	Complete all closure activities set forth in the approved RCRA Tier 3 Component Closure Plan for all remaining WMA-C ancillary equipment.	12/31/2028

Number	Milestone	Due Date
M-045-82-J Lead Regulatory Agency: Ecology	Submit to Ecology a Detailed Design (90% design), Construction Quality Assurance Program and Plan that satisfy the requirements of WAC 173-303-335, Post-Post Closure Plan that satisfy the requirements of WAC 173-303-610(8)(b) and shall ensure compliance with all post-closure care requirements set forth in WAC 173-303-610(7)–(10) and WAC 173-303-665(6)(b), and Schedule for a Tier 2 landfill cover for WMA-C, as a permit modification request pursuant to WAC 173-303-830(4). The Detailed Design shall satisfy the requirements of WAC 173-303-665(6)(a) and the performance criteria set forth in the approved Tier 2 Closure Plan for the WMA C. The Schedule shall include dates for all construction activities identified in the Engineering Report submitted pursuant to M-045-82F. The permit modification request shall also include all outstanding closure information required by WAC 173-303-610(3)(a).	09/30/2026
M-045-83 Lead Regulatory Agency: Ecology	Complete all closure activities set forth in the approved RCRA Tier 2 Closure Plan for WMA-C.	~~To be established in accordance with the date identified in the M-45-82 Tier 2 closure plan~~ 02/31/2032