

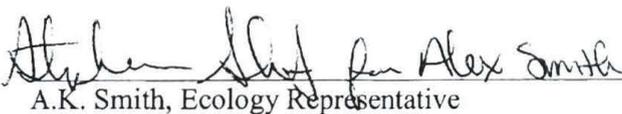
**Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019**



SIGNATURES:

Approval:  Date: 3/4/2020
W.F. Hamel, DOE-RL Representative

Approval:  Date: 3/23/2020
D.R. Einar, EPA Representative

Approval:  for Alex Smith Date: 3/12/2020
A.K. Smith, Ecology Representative

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019



Tri-Party Agreement

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

<u>Name</u>	<u>Organization</u>
<u>Scott Davis</u>	<u>WSA</u>
<u>Stephanie Brasher</u>	<u>MSA</u>
<u>Ben Elizon</u>	<u>DOE</u>
<u>Shelley Cimon</u>	<u>ODOE (call in)</u>
<u>David Kump</u>	<u>ECY</u>
<u>Dib Goswami</u>	<u>ECY -</u>
<u>John Temple</u>	<u>ECY</u>
<u>Mark French</u>	<u>RL</u>
<u>KIM WELSCH</u>	<u>ECY</u>
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Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019



Tri-Party Agreement

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

<u>Name</u>	<u>Organization</u>
Sara Austin	CHPRC
Theresa Bergman	CHPRC
Kim WELScott	ECY
NINA Menard	ECY
Bill Hemel	DOE
John Price	ECY
Craig Cameron	EPA
Kathy Higgins	DOE
Tom Tager	DOE
Theresa Howell	Ecology
Michael Cline	DOE

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019

1.0 INTRODUCTION

The Central Plateau/River Corridor meetings are normally held quarterly between the U.S. Department of Energy, Richland Operations Office (DOE-RL), Washington State Department of Ecology (Ecology), and the U.S. Environmental Protection Agency (EPA), hereafter referred to as the Parties.

2.0 LIFECYCLE COST REPORT

MSA reported the one page briefing for the Lifecycle Cost Report (LCR) (M-036 milestone) will be included in the final Administrative Record (AR) package. There will be no DOE briefing provided at this time.

3.0 M-035 DATA ACCESS

DOE provided an update on milestone M-035-09K, regarding data access issues, which was currently in the dispute resolution process. DOE reported that Ecology issued the Director's Determination on December 5, 2019 and DOE will be appealing the determination. DOE stated milestone M-035-09L is due in March 2020 and the Parties need to discuss the path forward for potentially extending the milestone, since M-035-09K will be appealed.

DOE noted work continues on providing data access to the Parties. DOE identified problems with the Visitor Hanford Computer Access Request (VHCAR) process, noting issues with the workflow in the electronic suspense tracking and routing system (ESTARS). DOE reported they have launched the new Administrative Record (AR) website and are in the process of scanning old AR information and adding this data into the AR. DOE is also helping Ecology store large permitting documents. There were no comments from Ecology.

4.0 PLUTONIUM FINISHING PLANT CLOSURE

4.1 Milestone

DOE reviewed the milestone slide and reported that milestone M-083-00A was missed, but safe and steady progress continues.

4.2 Project Baseline Performance

DOE reported that Plutonium Finishing Plant (PFP) is working from the 2019 budget carryover of 29.5 million dollars that has no scope attached to it. DOE estimates a total of 31.5 million dollars will be needed to manage the rest of the project.

Ecology asked if the sub-slab sampling was included in the 29 million dollars. DOE responded that the sampling is included in the 29 million.

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019

4.3 Planned Activities

DOE reported 234-5Z lower-risk demolition is complete. In early November, transuranic piping was taken out of tunnels 4 & 5 and will be transported to the Central Waste Complex (CWC).

Ecology asked if the Waste Isolation Pilot Plant (WIPP) receives standard waste boxes (SWB). DOE responded they are using SWBs until they are certain what the waste certifies.

DOE reported that planned activities for December through February are to complete demolition of 234-5Z of Remote Mechanical C (RMC) and Remote Mechanical A (RMA) lines, and start rubble reduction and contaminated soil load-out.

DOE noted if the weather holds the PFP rubble pile removal will start at the end of the week. The air dispersion model is scheduled for 30 days based on 300 containers. DOE estimated there are about 90 containers. Further discussion is taking place to formulate a path forward.

DOE reported the misting machines make great snow machines with the cold weather, so they have added a fixative to the misting machines to help accommodate for the weather. DOE stated, weather permitting, March 3, 2020 is the planned date for PFP to be slab-on-grade and will transition to the Removal Action Work Plan to transfer PFP to the surveillance and maintenance mode under EPA.

DOE mentioned they are planning to sample through the Plutonium Reclamation Facility (PRF) and Aluminum Removal Facility (ARF) slabs to verify what is beneath them as part of the 324 facility takeaway.

5.0 K BASINS SLUDGE REMOVAL PROJECT AND RIVER CORRIDOR CLOSURE

5.1 K Basins Engineered Container Sludge Removal Significant Accomplishments

DOE reported that sludge removal is complete and the picture on the presentation slide is of the dignitaries that came out and celebrated.

5.2 Milestone Summary

DOE noted that the completion letter was sent for milestone M-016-176, Sludge Removal from 105KW Fuel Storage Basin.

5.3 300-296 Soil Removal

DOE explained 300-296 is the focus of debris removal in the 324 B hot cell. DOE is installing grout curtains to support areas that cannot be accessed and drilling micro piles. DOE reported the contamination levels were higher on the first two holes, but the contamination at the third and fourth holes was lower. DOE noted there were contamination control issues coming in and out of the airlock. A safety pause was initiated and a team was developed to perform a root cause analysis and implement corrective actions. An independent third party RADCON team was

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019

assembled to look at best practices. DOE stated drilling will start again in late January or early February 2020. EPA asked how DOE figured out the individual was contaminated. DOE responded it was discovered during a survey.

DOE reported continuing size reduction and waste bin loading of B-Cell debris to ERDF.

DOE mentioned there was a Science, Technology, Engineering and Math (STEM) class from Pasco, Washington onsite and they had a chance to interact with the Secretary of Energy, Rick Perry. Ecology added the STEM students were good at using the remote excavator, even better than some of the older operators.

5.4 Milestone Summary

DOE noted the change control form for milestone M-016-86 was submitted to EPA, but they are still working on gathering additional documentation. Milestone M-016-00C has been reported "At Risk" because the milestone is set up to finish basin demolition by 2023 and have interim safe storage (ISS) by 2024, which is not possible. DOE reported they are working with EPA and will submit a change package for milestone M-093-28 for 105-KE/KW reactor ISS, which will include extending the M-016-00C due date to 2028. EPA noted they would like to see waste site cleanup continue on a consistent path.

Ecology asked if there was a multi-year budget profile for finishing K, what ISS is going to cost per year and what the cost per year is for Deactivation, Decommission, Decontamination and Demolition (D4) and soil excavation. DOE responded that they have their baseline, contractors' baseline and the federal baseline that has costs in it. From there, DOE is setting up task orders to complete the work.

6.0 LAND DISPOSAL RESTRICTIONS REPORT

DOE stated they have received the approved 2014 Land Disposal Restriction (LDR) package and is awaiting a letter with the agreed upon comments. DOE reported that the 2019 LDR report meetings will start taking place in January 2020.

7.0 SOLID WASTE STABILIZATION AND DISPOSITION PROJECT

Ecology asked if DOE had looked at the question from Ecology regarding fiscal year 2020 funding below the line on the Integrated Priority List (IPL) in regards to milestone M-091 planning. Ecology followed up by asking if DOE would move more boxes if there was additional funding. DOE responded they had not seen the letter and asked if Ecology could re-send the

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019

letter and they would follow up on it. DOE also stated they would have to look at the schedule along with the Perma-Fix license.

7.1 Accomplishments

DOE reported that M-091-47D, to certify or treat 280-m³ of transuranic mixed/mixed low-level waste (TRUM/MLLW), has been met and DOE has submitted change control M-91-19-03 to Ecology. DOE reported milestone M-091-52-T01C continues with removal of waste containers from outside storage area B, and 16 of the 20 containers have been moved. Work is expected to be finished by November 2020. Milestone M-091-52-T02, engineering evaluation/cost analysis (EE/CA) for retrieval, is in review. DOE reported milestone M-091-53's tentative agreement (TA) has not been signed and negotiations continue; however, the milestone has been completed. Ecology responded they agree the milestone has been completed.

7.2 M-092-00

DOE reported milestone M-092 for creating a disposition path and establishing interim agreement milestones for Hanford Site cesium and strontium capsules continues to make progress. The construction contract for the capsule storage area (CSA) will be awarded starting in March. DOE noted completion of decontamination and painting of the Waste Encapsulation and Storage Facility (WESF) Canyon. DOE reported other activities include completing variance contract analysis to reflect final design for the cask storage system, WESF modifications preparations at the mockup, and mobilization of the construction contractor for the CSA.

7.3 Milestone Summary

DOE reviewed the milestone summary page that indicated milestones M-091-52, M-091-47D, M-091-53, M-091-52-T01A, and M-091-52T01B are complete.

7.4 Project Baseline Performance

DOE noted no significant cost or schedule variances on the Project Baseline Performance slide.

7.5 Planned Activities December – February 2019

DOE reported planned activities include removing mixed waste containers from an outside storage area in support of milestone M-091-52-T01C along with the M-091 TA negotiations.

8.0 CENTRAL PLATEAU REMEDIATION PROJECT

8.1 REDOX Risk Reduction Accomplishments

DOE reported focusing on canyon facilities, mainly the Reduction and Oxidation (REDOX) facility, and doing risk-reduction by draining and packaging approximately 1,600 gallons of sodium hydroxide from tanks T-508, T-604, and associated piping. DOE is working to remove

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019

the combustibles in the silo and galleries of REDOX, completing initial shots of non-destructive assay on process lines, along with infrastructure upgrades to improve safety and future facility work. DOE noted they are better handling the radiological and chemical conditions in the facility by ensuring appropriate staffing levels.

8.2 Other Accomplishments

DOE-RL started working on biological contamination cleanup in 224-B and completed the asbestos removal. DOE completed processing piping and concrete stanchions from the 200 East Area Integrated Disposal Facility (IDF) steam line expansion loop and removal of legacy containment in 224-T. DOE noted ventilation upgrades are taking place at the REDOX stacks.

DOE reported on regulatory documents that are in progress including the Removal Action Work Plan for the PUREX white powder.

8.3 Milestone Summary

DOE briefly reviewed the milestone summary page of milestones and statuses. DOE reported dispute resolution is still in progress for milestone M-016-255 & M-016-256 at the Project Manager level until December 31, 2019. Ecology suggested extending the dispute 6 months because these milestones are dependent on the pending milestone M-015 series negotiations.

Ecology noted the milestone series M-037 public comment period ended in November 2019 and asked for the status on the Response to Comments Document. DOE responded they are looking for Ecology's standard response language for the comment resolution. Once DOE receives the comment responses, they will send the document back to the regulators for review.

9.0 SOIL AND GROUNDWATER REMEDIATION PROJECT

9.1 Accomplishments – River Corridor

DOE reported restarting the 100-KW soil flushing test. DOE provided a graph that indicates chromium spikes in the 1,600 mg/L concentration range. However, it did come down below drinking water standards. DOE is currently running the test and getting readings at 100 mg/L and may let it run through winter. DOE stated the soil flushing test has been successful and would like to continue the technology forward to other sites, including K and possibly in D & H. If DOE sees hot spots, this technology can push the contamination down and capture it, which is different than what the local newspaper is reporting.

DOE noted they are installing wells at 100-HR-3 per the 2020 plan and have initiated public comment period for the 100-BC, which ended December 9, 2019. DOE-RL is addressing the questions and will respond. DOE-RL reported transmitting the 100-N remedial investigation/feasibility study (RI/FS) report draft B to Ecology for review. DOE also stated they have completed the 100-N biennial bioventing system, and the next step is to perform core sampling. Ecology responded that the bioventing system needs to be looked at.

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019

9.2 Accomplishments – Central Plateau

DOE reported they issued the 200-ZP-1 optimization study test plan on September 30, 2019. On October 1, 2019, DOE initiated the plan to suspend nitrate treatment up to 5 years to see what sampling results and modeling will provide, as well as if nitrates will attenuate on their own. DOE wants to expand rad and carbon tetrachloride treatment. Currently the biological treatment system is a bottleneck and hindering expansion. DOE noted equipment will not be online until fiscal year 2021.

DOE stated they have submitted the RD/RA work plan, sampling analysis plan (SAP) and Performance Monitoring Plan (PMP) for 200-ZP-1. DOE noted the plans support suspension of nitrate treatment and working on carbon tetrachloride, technetium-99 and uranium. DOE reported issuing the 200-UP-1 RD/RA and submitting the 200-BP-5/200-PO-1 proposed plan to the Parties.

Ecology asked if the DV-1 treatability test is funded in FY 2020. DOE responded the treatability test is not funded, and it is being looked at in the IPL. Ecology requested to move the treatability test above the line because the milestone for DOE's RI/FS report is to be missed, not for budget reasons, but because of technical reasons as more time is needed to complete the treatability test. Ecology suggested splitting the milestone off the Agreement in Principle (AIP), which is budget-based, and provide a new schedule for the RI/FS. DOE-RL stated until they know what test is needed there is no basis to develop a schedule. Ecology suggested that the Parties get together and mock up a conceptual schedule. DOE stated they do not want to spend money by going into the field prematurely and finding out that the tests will not work.

Ecology proposed working on a schedule that consists of a 4-step process that includes completing a bench scale test, identifying promising technologies for field tests, identifying field test locations, and testing them in the field. DOE stated that the schedule would represent only durations and took the action to schedule a meeting with Ecology to draft a conceptual schedule.

DOE reported completing electrical resistivity tomography (ERT) for two cribs in 200-WA-1 to help identify where moisture is in the ground for characterization. Comments on the 200-EA-1 RI/FS work plan have been incorporated and will be finalized after the TA is negotiated. Ecology noted that the work plan actions may come out of the Representative Analogous Waste Site Coordinating Agency Liaisons (RASCAL) process.

9.3 Milestone Summary

DOE reported milestone M-015-93C, initiate characterization of the 200-SW-2 OU landfills, as in dispute. The Parties have agreed that milestone M-015-93C needs to be coordinated with the M-091 milestones to align with removal of transuranic (TRU) waste prior to characterization.

DOE noted milestones M-015-96 and M-015-21A were completed.

DOE reported they are working on milestone M-015-97, to complete the FS Report for the 100-OL-1 OU and finalize RI Work Plan. DOE is working with Ecology on a TPA change notice, TPA-CN-0872, to modify the RI Work Plan (DOE/RL-2012-64). Ecology asked if the money for Pacific Northwest National Laboratories (PNNL) to perform the FS work has been

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019

committed and noted being 3 months into the fiscal year and PNNL has 8 months worth of work left, therefore, Ecology suggested the money should remain in the budget for PNNL to complete the work. DOE responded by saying they are on schedule to submit the FS.

DOE reported both milestones M-015-98 and M-015-99 are in dispute resolution, along with the associated milestones M-015-84 and M-015-91B. EPA stated they disagree that the delay in the 200-WA-1 milestones are budget-related and believe DOE chose to put them off by funding other work that was not milestone related. DOE responded by saying the IPL discussions will help resolve this by providing EPA and Ecology an opportunity to help prioritize work.

DOE asked if the RASCAL team has created a list of what milestones will be affected by the RASCAL process. Ecology responded that it's too early to verify milestones at this time but it is on the to-do list.

DOE reported they are on schedule to complete all the M-024 milestones. Milestone M-085-70 is in dispute resolution while M-085-80 and M-085-90 are "At Risk."

Ecology requested DOE review well commitments on the IPL and verify if they are above or below the line to be funded in FY20. DOE responded by saying the well work is being done by the priority of work requiring well support.

Ecology requested that milestone M-085-80, which is the PUREX RI/FS work plan, be reviewed in detail. PUREX has mixed waste in the tunnels that will be sitting longer than 1 year, and in accordance with the Federal Facility Compliance Act of 1992 requirements, there has to be an enforceable schedule and be in compliance with that schedule. Ecology noted DOE needs to submit a change control form to extend the milestone due date or fund the work to complete it.

DOE requested from the RASCAL team, a list of milestones that will be addressed as part of the RASCAL evaluation and ones that are not. Ecology proposed the RASCAL team creating a list of milestones directly related to the OUs being evaluated, milestones that are in the draft Budget AIP which could be impacted by the outcome of the RASCAL process, and the milestones that are not related to either the Budget AIP or RASCAL, to compare against the IPL.

DOE reported a change control form has been drafted to extend the due dates of target dates M-016-119-T01 and M-016-110-T02 by 10 years and is currently with the EPA and Ecology for review.

9.4 RL-30 Project Baseline Performance

DOE-RL stated over the 10-year period, 1.7 billion dollars of cleanup has been completed, with a 58 million dollar variance.

9.5 Planned Activities

DOE reported completion of public review of the 100-BC-5 Proposed Plan, working on resolving Ecology's comments on 100-HR-3 RD/RA Work Plan, resolving EPA's comments on the Draft B 100-KR-4 RI, complete the 100-KR-4 FS, and receive Ecology's comments on the 100-NR-2 RI/FS.

Central Plateau/River Corridor
Tri-Party Agreement Quarterly Milestone Review Meeting Minutes
December 19, 2019

DOE continues infiltration tests/soil flushing at KW.

DOE stated the Central Plateau is finalizing the 200-EA-1 RI/FS Work Plan following the AIP, resolving EPA's comments on the 200-ZP-1 RD/RA Work Plan and issue revision 0 of the 200-BP-5/200-PO-1 FS and Proposed Plan. Ecology acknowledged their comments on the 200-BP-5/200-PO-1 are almost resolved. DOE noted they plan to submit the Rev 1 200-UP-1 RD/RA Work Plan to EPA.

DOE-RL reported working on issuing/certifying the 216-B-3 Pond, 216-S-10 Pond and Ditch, 241-CX Tanks, 216-A-29 Ditch, and 216-B-63 Trench closure plans. Ecology stated they are working on resolving some issues on the performance standards table with DOE in the closure plans.

10.0 KEY DOCUMENTS LIST

DOE noted the key document list was updated and the updates were shown in blue font.



AGENDA
Tri-Party Agreement Central Plateau/River Corridor Milestone Review
December 19, 2019

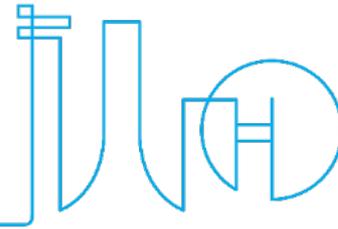
Place: Ecology, 3100 Port of Benton Blvd., Richland
Time: 9:00-10:30 a.m.
Chair: Bill Hamel

Time	Milestones	Subject	DOE Presenter
9:00 a.m.	M-035	Data Access	Ben Ellison
9:10 a.m.	M-083	Plutonium Finishing Plant (PFP) Closure	Tom Teynor
9:20 a.m.	M-016, 089, 093, 094	100 K Remediation/River Corridor Closure	Mark French
9:35 a.m.	M-026	Land Disposal Restrictions Report	Mark French
9:40 a.m.	M-091, M-092	Acquisition of Facilities to treatment, storage, and disposal (TSD), transuranic (TRU), transuranic mixed (TRUM) and low-level mixed waste (LLMW)	Mark French
9:55 a.m.	M-016, 037, 085	Central Plateau Remediation	Mark French
10:15 a.m.	M-015, 016, 024, 085	Soil and Groundwater Remediation	Mike Cline
10:25 a.m.	—	Richland Operations Office Key Documents List	Mike Cline
10:30	—	Adjourn	—

M-035-09 - Biennial Assessments of Information and Data Access Needs



- “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.”
- M-035-09K
 - Ecology issued a director’s determination on December 5.
 - DOE will appeal the decision.
- M-035-09L
 - Milestone due March 31, 2020.



PFP Closure Project, September – November 2019

TPA Milestone Series: M-083



234-5Z Demolition Progress November 2019



December 19, 2019
U.S. Department of Energy
U.S. Environmental Protection Agency
State of Washington, Department of Ecology

Milestone

Milestone	Due Date	Description	Status
M-083-00A	9/30/17	Complete PFP Facility transition & selected disposition activities. Completion of this major milestone includes the following key elements: 1) completion of all activities necessary to achieve end point criteria established through Milestone M-83-20 for placing the PFP facility in a safe and stable S&M mode, 2) completion of all activities described in the approved M-83 series interim milestones and target date; and 3) completion of the balance of PFP selected disposition activities pursuant to the final action memoranda and work plans. Also see “description/justification” contained in change form M-83-01-03.	Missed



Project Baseline Performance

Contract to Date (Through November 2019)

RL-0011 Nuclear Material Stabilization and Disposal	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	\$1,128.2	\$1,115.9	\$1,213.0	(\$12.3)	(.1%)	(\$97.0)	(8.6%)	\$1,143.6	\$1,236.0	(\$92.4)

Fiscal Year to Date (Through November 2019)

RL-0011 Nuclear Material Stabilization and Disposal	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	\$6,208.6	\$7,265.3	\$8409.1	\$1.1	(17%)	(\$1.1)	(15.7%)



Status: September through November 2019

- 234-5Z Lower-risk demolition complete



- Began 234-5Z final phase demolition of Tunnels 4 & 5



Planned Activities December 2019 through February 2020

- Complete demolition of 234-5Z of Remote Mechanical C (RMC) and RMA lines
- Start PRF rubble and contaminated soil load-out





Rectangular

K Basins Sludge Removal Project

Milestone M-016-176 and River Corridor Closure

TPA Milestone Series: M-016, M-089, M-093, M-094

September - November 2019



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



December 19, 2019

K Basins Engineered Container Sludge Removal Significant Accomplishments (through November 2019)

Engineered Container Retrieval and Transfer System (ECRTS) Operations

- STSC #20 was delivered to T Plant on September 9, 2019, completing Engineered Container Sludge Removal.
- Prepared final paperwork documenting completion of TPA Milestone M-016-176, Complete Sludge Removal from 105KW Fuel Storage Basin.
- Performed bulk and end point criteria inspections of Engineered containers as they are emptied to support 100K Closure.
- Transitioned staff in support of Garnet Filter Media Retrieval and other basin closure activities.



Milestone Summary

Milestone	Due Date	Description	Status
M-016-176	12/31/2019	Complete Sludge Removal from 105-KW Fuel Storage Basin	Complete



300-296 Soil Removal

Significant Accomplishments (September 2019 through November 2019)

- Installed shielding plates for A-Frame dampers. (09/03/19)
- Removed the A-Gallery monorail. (09/03/19)
- Repaired A-Cell door. (09/06/19)
- Completed excavation for temporary shoring to support soil stabilization grouting. (09/06/19)
- Completed fourth pilot hole. (11/13/19)
- Continued size reduction and waste bin loading of B-Cell debris.
- Performed excavation scans of the temporary north shoring site. (09/09/19)
- Completed supply anemometer placement on D-Cell and C-Cell inlet. (09/11/19)



ng in



300-296 Soil Removal

Significant Accomplishments (cont.) (September 2019 through November 2019)

- Drilled first micropile to depth at the temporary north shoring excavation site. (09/13/19)
- Completed installation of the gallery side of the water delivery system. (09/17/19)
- Initiated activities to level truck lock floor. (09/18/19)
- Hosted a tour for DOE-RL and a foreign national visitor from the UK. (09/26/19)
- 324 Project hosted the Secretary of Energy, Rick Perry, Senator Mark Walden (Oregon), Congressman Dan Newhouse, and other distinguished guests from DOE and Jacobs. Visitors observed and interacted with 22 STEM students and educators from Chiawana High School, who were provided hands-on opportunities to operate Mockup equipment. (10/01/19)



Secretary Perry speaking with students



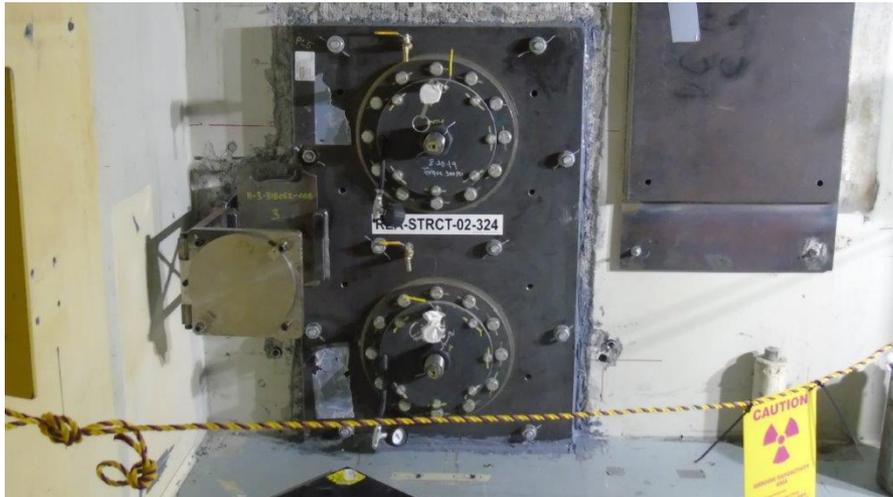
BROKK excavator operation



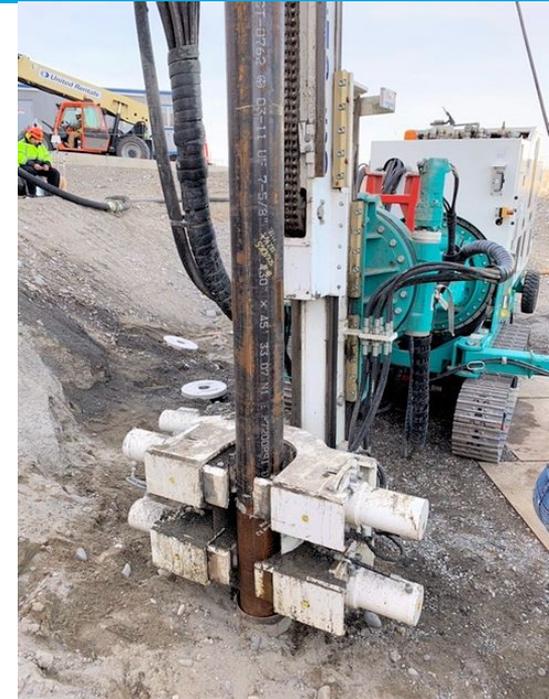
300-296 Soil Removal

Significant Accomplishments (cont.) (September 2019 through November 2019)

- Completed 9 of the 10 initial drill locations for the North temporary shoring site. (10/15/19)
- Installed anemometer on South Airlock supply inlet. (10/26/19)
- Completed installation of the NE through support assembly. (10/14/19)



Completed NE through support assembly



Drilling operations



Drilling operations



300-296 Soil Removal

Significant Accomplishments (cont.) (September 2019 through November 2019)

- Filled sixth 9x5x5 box with 3 bins of B-Cell debris. (10/10/19)
- Loaded debris from A-Cell into 9x5x5 box. (10/16/19)
- Completed grouting of cubicles on first floor in A-Gallery. (10/24/19)



Drilling operations

Filled sixth 9x5x5 box with 3 bins of B-Cell debris



300-296 Soil Removal

Significant Planned Actions

- Due to a contamination event that occurred on November 14, 2019, the project has suspended work beyond minimum safe activities. An individual was discovered with contamination on their skin after egressing the Airlock. The individual was decontaminated and cleared the PCM. Following a meeting with RRMP leadership team, the Stop Work for 324 has been updated as such: The Stop Work at 324 prohibits any activities in radiologically contaminated areas beyond those required for min-safe compliance. CHPRC is still evaluating the cost and schedule impacts of this event.



Project Baseline Performance

Contract to Date through November 17, 2019

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Cost Variance (\$)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	684.0	672.2	639.5	(11.8)	32.7	693.0	662.8	30.2
Numbers are rounded to the nearest \$0.1 million.								



Milestone Summary

Milestone	Due Date	Description	Status
M-016			
M-016-00B	9/30/2018	Complete all 300 Area remedial actions including the 618-10 burial ground, but not including the 618-11 burial ground, 300-296, and sites associated with retained 300 Area facilities and the utility corridors. Completion of all remedial actions is defined as the completion of the ROD requirements in accordance with an approved RD/RA work plan for all waste sites except 618-10, 316-4 and 600-63 which will be completed through backfill	Complete
M-016-85	9/30/2025	Complete remedial actions for 300-296 and final disposition for 324 building and Ancillary buildings	On schedule. Due date extended per Change Control M-16-19-01 approved 6/27/19
M-016-85A	9/30/2021	Complete remote excavation of the 300-296 waste site	On schedule
M-016-086	9/30/2021	Complete remedial actions for 618-11 burial ground in accordance with DOE/RL-2014-13-ADD1	At Risk
M-016-178	12/31/2019	Initiate deactivation of 105-KW Fuel Storage Basin	On schedule.
M-016-00C	9/30/2024	Complete all response actions in the 100K Area	At Risk
M-093			
M-093-27	9/30/2024	Complete 105-KE & 105-KW reactor ISS in accordance with removal action work plan	On schedule.
M-093-28	12/31/2019	Submit change package for proposed interim milestones for 105-KE/KW reactor interim safe storage	On schedule.
M-094			
M-094-00	9/30/2018	Complete disposition of all 300 Area Surplus Facilities excluding the 324 Building	Complete

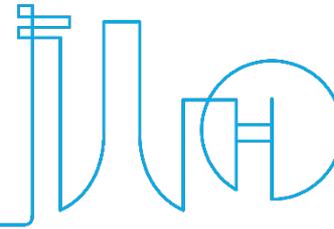




M-026-01 Land Disposal Restrictions

TPA Milestone M-026-01 Quarterly Status

- DOE submitted a letter July 30, 2019, transmitting the agreed to changes documented in a review comment record, concluding the comments from the 2014 LDR Full Report.
 - DOE is awaiting Ecology's signature on the revised CY 2014 report.
- The parties are holding regular project manager meetings, and DOE is on schedule to deliver the CY 2019 LDR Report
- The Parties will enter into “parking lot” discussions in the near term, to shape the content of future reports.



Solid Waste Stabilization and Disposition Project

TPA Milestone Series: M-091, M-026, and M-092

September – November 2019

December 19, 2019



U.S. Department of Energy

U.S. Environmental Protection Agency

State of Washington, Department of Ecology

Columbia River White Bluffs



Accomplishments

September – November 2019

- M-091-47D Certify or Treat 280-m3 of TRUM/MLLW:
 - Met 280 m3 in August 2017. Awaiting negotiations of M-91 series for additional milestones.
 - Completed with submittal of CCF M-91-19-03 to Ecology via letter 19-AMPR-0065 dated 6/27/19.
 - Waste shipments continue to PFNW, completed 1,045.9 m3 since August 2017.
- M-091-52-T01C:
 - Continued removal of mixed waste containers from Outside Storage Area A and/or Outside Storage Area B. Sixteen (16) of the twenty (20) have now been removed.
- M-091-52-T02:
 - Preparing Engineering Evaluation and Cost Analysis (EE/CA) for submittal to DOE-RL.
- M-091-52-T03:
 - Preparing Mission Needs statement (CD-0) for CH processing facilities/capabilities for submittal to DOE-RL.
- M-091-53:
 - Tentative Agreement not signed.
 - Completed with submittal of CCF M-91-19-03 to Ecology via letter 19-AMPR-0065 dated 6/27/19.



Glovebox Size reduction and repackaging at Perma-Fix Northwest



Glovebox Size reduction and repackaging at Perma-Fix Northwest

Determine disposition path and establish interim agreement milestones for Hanford Site Cesium and Strontium capsules.

- September – November 2019 Accomplishments
 - Awarded Construction Contract for the Capsule Storage Area (CSA).
 - Completed Decontamination and Painting of the WESF Canyon.
- December – February 2019 Planned Activities:
 - Complete Variance Contract Analysis to reflect final design for the Cask Storage System.
 - Continue WESF modifications preparations.
 - Initiate Mobilization of the Construction Contractor for the CSA.



Milestone Summary

Milestone	Due Date	Description	Status
M-091			
M-091-52	12/29/2017	Submit change request with target dates for new/modified capabilities to process	Complete
M-091-47D	9/30/2018	Submit change request to establish next two TRU/MLLW annual certification/disposal milestones.	Complete*
M-091-53	9/30/2018	Submit Milestone Change Request to Replace Target Dates for Capabilities to Process TRUM Waste	Complete*
M-091-52-T01A	11/30/2018	Remove 5 MW containers from Outside Storage Area (OSA) A and/or Outside Storage Area B	Complete
M-091-52-T01B	11/30/2019	Remove 10 MW containers from Outside Storage Area (OSA) A and/or Outside Storage Area B	Complete
M-091-03N	6/30/2020	Submit Revision of TRUM Waste and Mixed Low-level Waste Preventative Maintenance Procedure to Ecology	On Schedule
M-091-44T	9/30/2020	Submit Change Request to Establish Schedule for Achieving Offsite Shipment of All TRUM Waste	On Schedule
M-091-49A	9/30/2020	Submit a Change Request to Establish a Schedule for Achieving the Retrieval of RSW	On Schedule
M-091-052-T01C	11/30/2020	Remove 20 MW containers from Outside Storage Area (OSA) A and/or Outside Storage Area B	On Schedule

*DOE-RL statused as "complete" at M-091 PMM on 9/12/19.



Project Baseline Performance through November 2019

RL-0013 Solid Waste Stab & Disp	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	964,783.2	960,212.8	904,113.9	(4,570.6)	-0.5%	56,098.9	5.8%	1,080,364.4	1,012,521.7	67,842.7

Numbers are rounded to the nearest \$0.1 million.

Title	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance	Cost Variance
Project Management	179,858.2	179,357.0	144,945.3	-0.3%	19.2%
Capsule Storage & Disposition	111,284.6	111,282.8	121,597.1	0.0%	-9.3%
Mixed Low Level Waste Treatment	43,182.5	43,182.5	37,200.3	0.0%	13.9%
TRU Retrieval	100,365.4	100,322.3	112,563.1	0.0%	-12.2%
TRU Repackaging	118,820.7	118,791.7	112,672.3	0.0%	5.2%
Waste Receiving and Processing Facility	60,008.5	59,264.6	57,396.0	-1.2%	3.2%
T Plant	149,514.4	149,000.2	129,894.1	-0.3%	12.8%
Central Waste Complex	125,158.1	124,757.2	123,347.1	-0.3%	1.1%
TRU Disposition	34,042.4	34,177.3	25,837.6	0.4%	24.4%
Mngt of Cesium and Strontium Capsules Proj W-135	14,620.2	14,165.2	14,603.8	-3.1%	-3.1%
Capsule Interim Storage Operations	27,928.3	25,912.0	24,057.3	-7.2%	7.2%



Planned Activities

December – February 2019

- M-091-47D TRUM/MLLW Treatment
 - Met volume processed, August 8, 2017. Complete renegotiation of M-091 series milestones.
 - Completed with submittal of CCF M-91-19-03 to Ecology via letter 19-AMPR-0065 dated 6/27/19.
 - Continue waste processing toward next objective.
- M-091-52 Target Milestones
 - Continue removing mixed waste containers from OSA A and/or OSA B in support of M-091-52-T01C.
 - Continue progress towards M-091-52-T02 to develop Interim Response Action to resume waste retrieval in support of M-091-49A.
 - Continue progress towards M-091-52-T03 to develop a mission needs statement (CD-0) regarding CH processing facilities/capabilities.
- M-091-53
 - Completed with submittal of CCF M-91-19-03 to Ecology via letter 19-AMPR-0065 dated 6/27/19.
 - Tentative Agreement not signed.



Central Plateau Remediation Project

TPA Milestone Series: M-016, M-037, M-085

September – November 2019
December 19, 2019



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

Columbia River White Bluffs



REDOX Risk Reduction Accomplishments

September 2019 through November 2019

- Drained and packaged approximately 1,600 gallons of sodium hydroxide from tanks T-508, T-604, and associated piping.
- Completed combustibles and legacy waste removal in the silo and galleries of REDOX.
- Completed initial shots of non-destructive assay (NDA) on process line L16-H4 (plutonium nitrate line) in the North Sample Gallery (NSG) - 250 total shots.
- Completed ultra-sonic testing on process line L16-H4 in the NSG (roughly 84 gallons of residual liquids).
- Developed initial site layout plan for infrastructure upgrades at REDOX to improve safety and facilitate future work.



NDA compiling first-pass shot count at REDOX



Other Accomplishments

September 2019 through November 2019

- Initiated temporary power and lighting installation and biological hazard cleanup in 224-B.
- Completed perimeter ground scans for 224-B to identify below grade utilities to support the cold and-dark process.
- Completed scoping walkdowns of 224-B with subject matter experts.
- Completed down posting of the 224-B facility from a beryllium controlled area.
- Completed processing piping and concrete stanchions from 200 East Area Integrated Disposal Facility (IDF) steam line expansion loop.
- Removed two UICs and backfilled from the 200 East Area IDF steam line expansion loop.
- Abated over 3,500 linear feet of asbestos insulation from 200-E steam lines.
- Removed 500 linear feet of asbestos steam lines and associated support poles for the 222-S Laboratory

*200-W steam line removal
to create additional IDF access*



222-S steam line removal



Other Accomplishments

September 2019 through November 2019

- Performed PUREX National Emissions Standards for Hazardous Air Pollutants testing.
- Completed removal of legacy containment tent in a radioactive material area at 224-T.
- Completed installation of REDOX stack sampler callout system and performed annual fan preventative maintenance.
- Completed the 200E Tri-Annual (third of three) Inactive Waste Sites Surveillances ahead of schedule.
- Completed pumping of Tank 216-A-TK-2.



*Pump down 216-A-TK-2
(PUREX Stack
Condensate)*



Surveillance Activities



Accomplishments

September 2019 through November 2019

Canyon Stabilization Documents

- Submitted to Regulators:
 - DOE/RL-2016-15 PUREX Engineering Evaluation/Cost Analysis (EE/CA), Rev.0 (Complete)
 - DOE/RL-2016-47 Tier 2 PUREX Removal Action Work Plan (RAWP) for Regulator Review
 - DOE/RL-2016-14 B-Plant EE/CA, Rev.0 for Regulator Review
 - DOE/RL-2017-34 224B RAWP for Regulator Review
 - DOE/RL-2017-33 224B Sampling Analysis Plan (SAP) for Regulator Review
- Received from CHPRC:
 - DOE/RL-2016-53 PUREX Action Memorandum (AM), Decisional Draft (DD) for RL Review
 - DOE/RL-2017-46 Tier 2 PUREX SAP for RL Review
 - DOE/RL-2019-37 224T SAP, DD for RL Review
- In Development Nearing Completion:
 - DOE/RL-2019-36 224T RAWP, DD for RL Review



Milestone Summary

Milestone	Due Date	Description	Status
M-016-00 Complete Remedial Actions For All Non-Tank Farm & Non-Canyon OUs			
M-016-255	9/30/2018	DOE shall complete the removal of all waste sites for fiscal year 2018 as identified in TPA change package M-16-16-01	Dispute resolution
M-016-250D	3/31/2019	DOE shall submit a 3-year rolling prioritized schedule to implement waste site removal actions	Complete 3/27/19
M-016-256	9/30/2019	DOE shall complete the removal of all waste sites for fiscal year 2019 as identified in TPA change package M-16-17-01	Dispute resolution
M-037 TSD Closure Activities			
M-037-10	9/30/2020	Complete Closure for 6 Specified TSD Units	In abeyance 8/26/19 - TA approved, out for public comment 10/14/19 – 11/29/19
M-037-11	9/30/2024	Complete Closure Requirements for 216-B-3 & 216-S-10	In Abeyance
M-037-13	9/30/2022	Complete Closure for the 241-CX Tank System	In Abeyance
M-085-00 Complete Response Actions for Specified Canyon Facilities & Waste Sites			
M-085-82	12/31/2017	Submit to Ecology for approval proposal(s) for expedited response action(s) for one or more of the Tier 1 and Tier 2 facilities in the PUREX Geographic Area listed in HFFACO Appendix J.	Complete 12/7/17
M-085-74	6/30/2018	Submit Expedited Response Action for one or more Tier 1 and Tier 2 facilities in the B Plant geographical area.	Complete 6/30/18
M-085-100	9/30/2020	Submit Removal Action Work Plan for 224-T to EPA	On Schedule
M-016-250E	3/31/2020	Submit to ECY a 3-Year Rolling Prioritized Schedule to Implement Waste Site Removal Actions	On Schedule



Project Baseline Performance through November 2019

Contract to Date

BS 040/RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Cost Variance (\$)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)	SPI	CPI
BASE	287.5	281.8	548.7	(5.7)	(0.4)	340.0	342.9	(2.9)	0.98	1.00
ARRA	285.5	285.5	266.5	0	19.0	285.5	266.5	19.0	1.00	1.07
Total	573.0	567.3	548.7	(5.7)	18.6	625.5	609.4	16.0	0.99	1.03

Numbers are rounded to the nearest \$0.1M



Planned Activities for CPRM

December 2019 – February 2020

- Sample 293-A catch tank - prep for pump down.
- 191-S tank pit visual inspection – prep for pump down.
- Complete REDOX temporary exhauster – 90% design review.
- Complete closure of 276-BA.
- 224-B Complete Asbestos Removal (requires approved RAWP/SAP).
- Contract will be awarded to perform concrete cuts at REDOX to support future waste egress.
- Complete installation of REDOX shower trailer.
- Continuing infrastructure upgrades for the phased approach at REDOX to support future work.
- Implementation of DSA Rev 8 at REDOX.
- Complete installation of PUREX mobile office and shower trailers.
- Complete mechanical and electrical isolation indexes for PUREX North facilities.
- Continuation of effective RCRA Rev 9 permit with modified addendums.



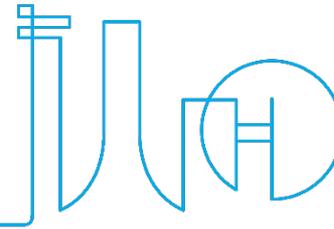
Planned Activities

December 2019 through February 20

Canyon Stabilization Documents

- Regulator Approvals:
 - DOE/RL-2016-15 PUREX EE/CA, Rev.0, Ecology
- RL/Regulator Reviews:
 - DOE/RL-2016-53 PUREX AM, Draft for RL Review
 - DOE/RL-2015-72 PUREX N RCRA Closure Plan (CP), Draft for RL Review
 - DOE/RL-2016-47 Tier 2 PUREX RAWP, Rev.0 for Ecology Review
 - DOE/RL-2017-46 Tier 2 PUREX SAP, Rev.0 for EPA and Ecology Review
 - DOE/RL-2016-14 B Plant EE/CA, Rev.0 for Ecology Review
 - DOE/RL-2017-34 224B RAWP, Rev.0 for Ecology Review
 - DOE/RL-2017-33 224B SAP, Rev.0 for EPA and Ecology Review
 - DOE/RL-2019-36 224T RAWP, Draft for RL Review
 - DOE/RL-2019-37 224T SAP, Draft for RL Review





Soil and Groundwater Remediation Project

TPA Milestone Series: M-015, M-016, M-024, M-085



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

September – November 2019

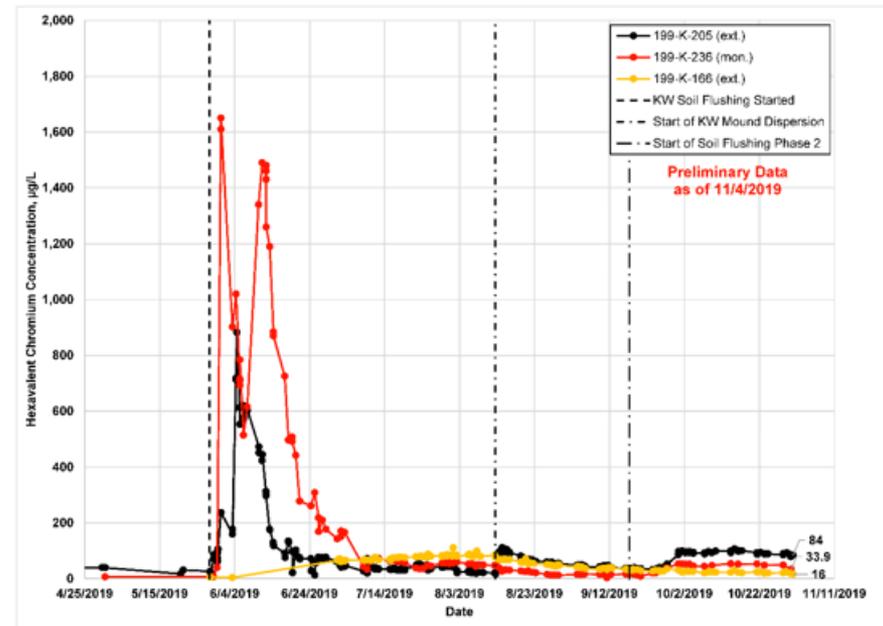


December 19, 2019

Accomplishments – River Corridor September - November 2019

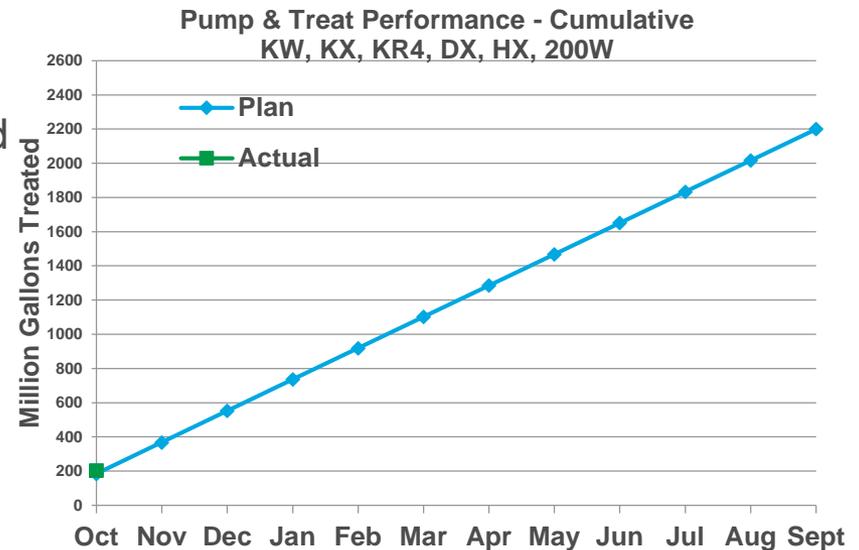
- Restarted the 100-KW soil flushing test on September 17, 2019 following a 30-day rebound period. Elevated chromium concentrations were observed indicating additional flushing is occurring in the vadose zone.
- Issued the 100-KR-4 Well Installation Sampling and Analysis Plan for the 2020 well drilling
- Issued the 100-HR-3 Well Installation Sampling and Analysis Plan for the 2020 well drilling
- Initiated the public comment period for the 100-BC Proposed Plan on October 7, 2019, which is scheduled to end on December 9, 2019.
- Transmitted the 100-N RI/FS Report, Draft B, to Ecology for review on November 18, 2019.
- Completed the 100-N biennial bioventing system respirometry test on November 19, 2019.

Cr(VI) data collected during soil flushing infiltration test



Accomplishments – Central Plateau September - November 2019

- Issued the 200-ZP-1 Optimization Study Test Plan on September 30, 2019. Initiated actions to expand treatment capacity to 3,750 gpm and suspend biological treatment for nitrate.
- Transmitted the 200-ZP-1 RD/RA Work Plan, Rev 1, Draft A to EPA for review on September 28, 2019.
- Transmitted the 200-ZP-1 Ringold A SAP, Draft A to EPA for review on October 16, 2019.
- Initiated resolution of EPA's comments on the 200-ZP-1 PMP on October 22, 2019.
- Issued the 200-UP-1 Remedial Design Investigation Report on November 14, 2019.
- Submitted the 200-BP-5/200-PO-1 Proposed Plan, Draft Rev 0, to Ecology, EPA, and EPA HQ for final checking on September 24, 2019.



Accomplishments – Central Plateau September - November 2019

- Resolved Ecology's comments on the 200-DV-1 Treatability Test Evaluation Report.
- Completed Electro-Resistivity Tomography (ERT) survey of sites 216-U-1/2 and 216-U-16 on October 25, 2019 associated with the 200-WA-1 characterization.
- Completed resolution and incorporation of Ecology's comments on the 200-EA-1 RI/FS Work Plan, except for the schedule. Work plan will be finalized following the Tentative Agreement negotiations.
- Supporting EPA's initiative to accelerate cleanup decisions for the Central Plateau Waste Sites.



Milestone Summary (Rolling 12 Months)

Milestone or Target Date	Due Date	Description	Status
M-015-00			
M-015-93C	9/30/2018	Initiate characterization of the 200-SW-2 OU landfills	Dispute Resolution
M-015-96	2/28/2019	Submit 100-OL-1 RI report and change request for FS report to Ecology	Completed
M-015-21A	3/31/2019	Submit 200-BP-5 and 200-PO-1 OU FS Report & PP(s) to Ecology	Completed
M-015-97	8/30/2020	Submit to Ecology, the 100-OL-1 Operable Unit Feasibility Study Report	On Schedule
M-015-98	6/30/2019	Complete remedial investigation of U Plant waste sites located in 200-WA-1 in accordance with WP	Dispute Resolution*
M-015-99	12/31/2019	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	Dispute Resolution*
M-015-112	11/30/2020	Submit RI/CMS & RI/FS Work Plan for 200-IS-1 Work Plan to Ecology	At Risk
M-015-92B	11/30/2022	Submit RI/CMS & RI/FS Report & PCAD/PP for 200-EA-1 OU to Ecology	At Risk
M-015-92C	3/31/2023	Submit RI/CMS and RI/FS Report and PCAD/PP for 200-IS-1 OU to Ecology	At Risk
M-015-38B	7/31/2023	Submit a FS Report & PP for CW-1, CW-3 & OA-1 OUs to EPA	At Risk
M-015-110B	9/30/2023	Submit CMS & FS & Proposed Plan/CA Decision for 200-DV-1 OU to Ecology	At Risk
M-015-93C	9/30/2018	Initiate Characterization Field Work for 200-SW-2 Operable Unit Landfills	At Risk

* Subsequent follow-on milestones (M-015-84 and M-015-91B) are also in dispute resolution.



Milestone Summary (Rolling 12 Months)

Milestone or Target Date	Due Date	Description	Status
M-024-00			
M-024-58L	6/1/2019	Initiate Discussions of Well Commitments	Completed
M-024-70-T01	8/1/2019	Conclude Discussions of Well Commitments initiated under M-024-58	Completed
M-024-71-T01	8/1/2020	Conclude Discussions of Well Commitments initiated under M-024-58	On Schedule
M-024-70	12/31/2019	Complete the Construction of All Wells Listed for CY19 and Before	Completed
M-024-71	12/31/2020	Complete the Construction of All Wells Listed for CY20 and Before	On Schedule
M-024-58M	6/1/2020	Initiate Discussions of Well Commitments	On Schedule
M-085-00			
M-085-70	9/30/2019	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CB-1 to Ecology	Dispute Resolution
M-085-80	9/30/2020	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CP-1 to Ecology	At Risk
M-085-90	9/30/2021	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CR-1 to EPA	At Risk
M-016-00			
M-016-119-T01	12/31/2020	Operational System in Place to Contain GW Plumes in 200 NPL Area	On Schedule
M-016-110-T02	12/31/2020	Take Actions Such that Hexavalent Chromium Meets Drinking Water Standards	On Schedule



RL-30 Project Baseline Performance

Contract to Date Through November 2019

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	1,648.9	1,644.2	1,596.3	-4.6	-0.3%	48.0	2.9%	1,766.0	1,707.9	58.1

Numbers are rounded to the nearest \$0.1 million.

Period of performance 10/1/2008 through November 2019



Planned Activities

December through February 2020

River Corridor

- Complete public review of the 100-BC-5 PP.
- EPA to initiate preparation of the 100-BC-5 ROD.
- Resolve Ecology's comments and issue the 100-HR-3 RD/RA Work Plan.
- Resolve EPA's comments on the Draft B 100-KR-4 RI.
- Complete Draft B 100-KR-4 FS.
- Receive Ecology's comments on the Draft B 100-NR-2 RI/FS.
- Continue infiltration of the KW Treatability Test.

Central Plateau

- Finalize 200-EA-1 RI/FS Work Plan following Tentative Agreement negotiations.
- Issue Revision 0 200-DV-1 Treatability Test Evaluation Report.
- Issue the 200-ZP-1 Performance Monitoring Plan.
- Resolve EPA's comments on the Draft A, Rev 1 200-ZP-1 RD/RA WP.
- Issue Revision 0 200-BP-5/200-PO-1 FS and PP.
- Resolve Ecology's comments on the 200-BP-5/200-PO-1 PP.
- Submit Draft A, Rev 1 200-UP-1 RD/RA WP to EPA for review.



Planned Activities

December through February 2019

Central Plateau

- Issue/Certify the 216-B-3 Pond Closure Plan.
- Issue/Certify the 216-S-10 Pond and Ditch Closure Plan.
- Issue/Certify the 241-CX Tanks Closure Plan.
- Issue/Certify the 216-A-29 Ditch Closure Plan.
- Issue/Certify the 216-B-63 Trench Closure Plan.



**Hanford Federal Facility Agreement and Consent Order
IAMIT Milestone Review Form
(For Milestones without Issues or Significant Activity)**

M-036-01 Hanford Lifecycle Scope, Schedule and Cost Report

Date: December 19, 2019

1. Significant Activities Last Three Months

- No significant activities to report over the last three months as the M-036-01 Milestone requiring the development of an annual Lifecycle, Scope, Schedule and Cost Report (LCR) has been changed (TPA Change Number M-36-19-01) to reflect a triennial report submittal schedule. The next report will be submitted in January 2022.

2. Budget Status (within budget or explain variance)

- No major issues identified.

3. Issues

- No major issues identified.

4. Non-TPA Regulatory Issues with Potential Impact to TPA Milestone

- No major issues identified.

5. Significant Activities Planned Next Three Months

- No significant actions are planned during the next 3 months. Work will continue on addressing feedback recieved on the 2019 Lifecycle Report.

TPA Decision Document List

	ROD Area Location	Document	Milestone	Milestone Due Date	Regulatory Review	DOE Lead	Contractor Lead	Regulatory Lead	Agency	Comments/Issues
1	200-IS-1 200 Area Pipelines	RFI/CMS & RI/FS Work Plan - Draft B	M-015-112: Submit Draft B RCRA Facility Investigation/Corrective Measures Study (RFI/CMS) & Remedial Investigation/Feasibility Study (RI/FS) work plan for 200-IS 1 OU to Ecology	11/30/2020	TBD TBD	<i>D. Hildebrand</i>	<i>D. St John</i>	<i>K. Welsch</i>	<i>Ecology</i>	Not funded in FY20.
2	200-IS-1 200 Area Pipelines	TSD - Closure Plan for 241-CX Tank System (241-CX-70, 241-CX-71, 241-CX-72)	M-037-13: Complete Closure Requirements for 241-CX-70, 241-CX-71, and 241-CX-72	9/30/2024	TBD TBD	<i>M. Kamal</i>	<i>D. St John</i>	<i>K. Welsch</i>	<i>Ecology</i>	241-CX Tank System: The Closure Plan was submitted to Ecology on August 14, 2019, to 're' confirm comment capture following resolution of a global Section H3 comment. We received Ecology's concurrence on August 26, 2019. CHPRC completed certification on August 27, 2019 and DOE completed certification on September 3, 2019. This closure plan is part of the bulk certification group
3	200-EA-1 200 East Closure Plans		M-037-10: Complete Closure for 6 Specified TSD Units	9/30/2020	On Going On Going	<i>M. Kamal</i>	<i>D. St John</i>	<i>K. Welsch</i>	<i>Ecology</i>	216-A-36B Crib: The Closure Plan was certified and submitted to Ecology on February 5, 2019. Ecology placed it into 'lockdown' on February 28, 2019. 216-A-37-1 Crib: The Closure Plan was certified and submitted to Ecology on February 5, 2019. Ecology placed it into 'lockdown' on May 3, 2019. 216-A-29 Ditch: The Closure Plan was placed into 'Freeze' status by Ecology on April 25, 2019. It is ready for certification and is waiting for bulk certification with the other three closure plans. 216-B-63 Trench: The Closure Plan was submitted to Ecology for review on June 15, 2019. Comments were received on July 10, 2019, and discussed on July 11, 2019. One Ecology comment remains to be resolved (the removal of 200-E-191-PL from the scope). Ecology is reviewing this deletion. This closure plan is part of the bulk certification group Hexone Storage and Treatment Facility: Closure plan is undergoing comment resolution with Ecology.
4	200-CW-1, 200-CW-3, and 200-OA-1 Outer Area	TSDs - Closure Plans for 216-B-3 Main Pond and 216-S-10 Pond and Ditch	M-037-11: Complete Closure Requirements for 216-B-3 & 216-S-10	9/30/2024	On Going On Going	<i>M. Kamal</i>	<i>D. St John</i>	<i>K. Welsch</i>	<i>Ecology</i>	216-B-3 Main Pond: The Closure Plan was submitted to Ecology on June 20, 2019, for their confirm comment capture review. One Ecology comment remains to be resolved regarding Part A waste codes and regulated constituents. This closure plan is part of the bulk certification group. 216-S-10 Pond: The Closure Plan was submitted to Ecology on August 6, 2019, for their confirm comment capture review. Comments were provided on August 7 and resolved on August 14. The Closure Plan was submitted to Ecology on August 21, 2019, to be 'frozen.' Ecology responded on August 22, 2019, with an additional comment regarding Part A waste codes and regulated constituents. Additional Ecology comments were received on November 13, 2019. This closure plan is part of the bulk certification group.
5	200-EA-1 200 East Inner Area	RFI/CMS & RI/FS Work Plan	M-015-92A: Submit Draft B RCRA Facility Investigation/Corrective Measures Study (RFI/CMS) & Remedial Investigation/Feasibility Study (RI/FS) work plan for 200-EA-1 OU to Ecology	7/31/2018	7/14/2018 8/16/2018	<i>D. Hildebrand</i>	<i>D. St John</i>	<i>K. Welsch</i>	<i>Ecology</i>	The Rev 0 RI/FS Work Plan has been prepared and comments resolved except for the schedule and associated TPA milestone. Finalization of the work plan is pending the Tentative Agreement negotiations and identification of a future TPA milestone
6	200-UP-1 200 West Area Groundwater	200-UP-1 Southeast Chromium Plume Remedial Design Report	M-16-193: Complete the remedial design investigation of the southeast chromium plume, including the installation of new wells and evaluation of groundwater monitoring data and install monitoring wells needed for remedy performance monitoring as defined in the 200-UP-1 RD/RA WP.	Milestone Completed on 9/25/2018	9/26/2018 12/13/2018	<i>J.Hanson</i>	<i>C. Cearlock</i>	<i>E. Laija</i>	<i>EPA</i>	The Rev 0 document was issued on November 14, 2019.
7	200-BP-5, 200-PO-1 200 East Area Groundwater	200-BP-5/PO-1 FS and PP	M-015-21A: Submit a 200-BP-5 and 200-PO-1 OU Feasibility Study Report and Proposed Plan(s) to Ecology.	Milestone Completed 3/27/2019	12/18/2018 2/28/2019 3/28/2019 5/13/2019	<i>J.Hanson</i>	<i>C. Cearlock</i>	<i>K. Welsch</i>	<i>Ecology</i>	The Rev. 0 Feasibility Study is being finalized, and resolving input from RL and regulator checking of the Draft Rev. 0 Proposed Plan.
8	100-BC-1, 100-BC-2, 100-BC-5 100-B/C	RI/FS Report and Proposed Plan	M-015-79: Submit RI/FS Report and PP for 100-BC	Milestone Completed 12/15/2016	12/16/2016 01/30/2017	<i>E. Glossbrenner</i>	<i>R. Evans</i>	<i>L. Buelow</i>	<i>EPA</i>	Documents are complete. The proposed plan completed the public review period on December 9, 2019.
9	100-KR-1, 100-KR-2, 100-KR-4 100-K	RI/FS Reports and Proposed Plan	M-015-66-T01: Submit RI/FS Report and PP for 100-K. Complete	Target Completed 9/21/2011		<i>E. Glossbrenner</i>	<i>E. Feist</i>	<i>L. Buelow</i>	<i>EPA</i>	The RI and FS have been separated to allow for a potential TI waiver to be pursued. The Draft B RI was delivered to EPA for review on May 3, 2019, and comments were received on October 7, 2019. The Draft B FS is scheduled for EPA review in March, 2020.
10	100-DR-1, 100-DR-2, 100-HR-1, 100-HR-2, 100-HR-3 100-D/H	RD/RAWP	None		1/24/2019 3/31/2019	<i>J.Sands</i>	<i>R. Evans</i>	<i>K. Welsch</i>	<i>Ecology</i>	Continued resolution of Ecology's comment requesting that implementing documents (Sampling & Analysis Plan [SAP] and Waste Management Plan [WMP]) be considered part of the RD/RAWP. Resolution of this comment is delaying completion of the RD/RAWP.

TPA Decision Document List

	ROD Area Location	Document	Milestone	Milestone Due Date	Regulatory Review	DOE Lead	Contractor Lead	Regulatory Lead	Agency	Comments/Issues
11	100-NR-1, 100-NR-2 100-N	RI/FS Reports and Proposed Plan	M-015-75: Submit FS/PP for NR-1/2 Complete	Milestone Completed 6/24/2013	6/25/2013 10/2/2013	S. Balone	B. Faught	A. Boyd	Ecology	Transmitted the Draft B RI/FS to Ecology for review on November 19, 2019.