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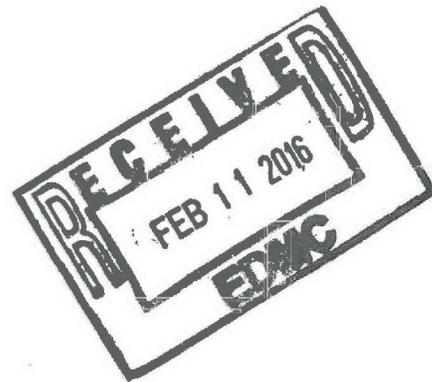
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# River Corridor/Central Plateau Quarterly Tri-Party Agreement Milestone Review Meeting Minutes

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Department of Ecology Building  
Richland, Washington

December 17, 2015



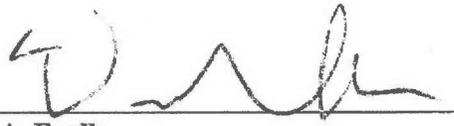
**SIGNATURES**

Approval:   
J.A. Hedges  
Ecology Representative

Date: 2/4/2016

Approval:   
R.J. Corey  
DOE/RL Representative

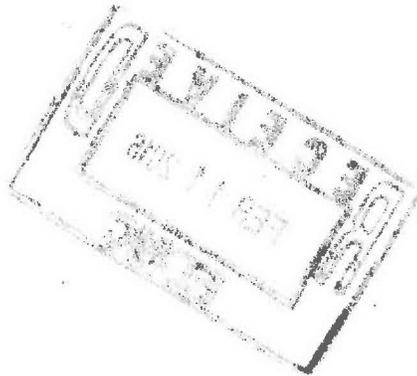
Date: 1/26/16

Approval:   
D.A. Faulk  
EPA Representative

Date: 2/1/16

Minutes Prepared by:   
M.J. Turner  
Mission Support Alliance

Date: 1/18/16



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## **RL Key Documents List**

An updated document list was provided. DOE-RL noted that the intent of providing the key documents list was to give a heads-up to Ecology and EPA about what documents are to be submitted in the near future, and that the presentation during this meeting could be streamlined by noting what documents are coming due over the next fiscal year. The updates were discussed as follows:

**No. 1** – DOE-RL reported that the dispute for the 200-IS-1 work plan has been extended to January 28, 2016, and the goal is to have a change package in place by that time. DOE-RL stated that a Rev. 0 is being prepared for submittal to Ecology, and should reflect what is contained in the change package. Ecology indicated that good progress is being made, and that Ecology is working with DOE-RL to set a date for the milestone to submit the work plan.

**No. 2** – DOE-RL stated that the 200-EA-1 work plan was extended through the tentative agreement, and the work plan production will start in 2016.

**No. 4** – The 200-IS-1 and 200-EA-1 Feasibility Study/proposed plans have been extended per the tentative agreement to 2022. DOE-RL noted that the work plans will need to be in place before starting on the other documents.

**No. 7** – DOE-RL noted that the 200-WA-1 FS/PP have been extended per the tentative agreement. DOE-RL stated that the work plan will be issued first, and then work will start on RI/FS. DOE-RL added that it is gearing up to perform characterization this year on WA-1 per what is assumed to be an approved work plan. DOE-RL added that funding is approved to start some work this year.

**No. 10** – DOE-RL stated that efforts are under way with EPA on getting comments resolved on the 200-PW-1/3/6, CW-5 RD/RAWP. DOE-RL has requested an extension to address EPA's comments that were received in November 2015. EPA stated that an extension would be acceptable.

**No. 11** – DOE-RL stated that the date for issuing the final RI/FS work plan for 200-DV-1 has been extended, and efforts are under way to finalize the work plan.

**No. 13** – DOE-RL stated that the Outer Area RI/FS work plan has moved out to 2023 and is not being worked in 2016. When funding is identified for 2016, DOE-RL will consider what work can be done in 2017.

**No. 18** – DOE-RL noted that the 200-BP-5/200-PO-1 FS/PP have been extended per the tentative agreement to 2018. DOE-RL stated that there have been some issues with the

modeling, and that Ecology has suspended its review. There are workshops scheduled in January 2016 to resolve the issues. Ecology stated that the topics for discussion at the workshops are being transmitted to DOE-RL today, and indicated that DOE-RL should be familiar with the topics. DOE-RL stated that an outline and a presentation have been prepared for the workshops.

No. 19 – (Not addressed)

No. 20 – DOE-RL noted that the 200-UP-1 technology evaluation plan was submitted to EPA, and EPA's comments have been incorporated into the document. DOE-RL is now in the process of finalizing the document.

No. 21 – DOE-RL reported that the enhanced monitoring will be completed within the next two months. DOE-RL noted that there are a few wells that have not had two years' worth of data collected. Efforts are under way to incorporate the data on the aquifer tubes into the RI/FS and bring it more up to date with the IRIS standards. Ecology asked about the chrome levels in the groundwater. DOE-RL responded that there is some chrome detected, but not a lot.

No. 22 – DOE-RL noted that EPA legal comments are in the process of being resolved, and expressed a concern that once the comments are resolved, that will start another review by Ecology's lawyer. DOE-RL added that Ecology has reviewed the document at the project manager level and by legal. Ecology stated that the comments have basically been resolved, and that it is working on updating the proposed plan based on the comments. DOE-RL asked about Ecology's position regarding comment resolution. Ecology responded that it is satisfied with the comment resolution.

No. 23 – DOE-RL stated that it is waiting on the data from the characterization boreholes for evaluation, and the information will be factored into the RI/FS document, similar to what was done for 200-BC-5. DOE-RL noted that additional characterization was done and has been completed.

No. 24 – DOE-RL noted that Ecology is preparing to grant an extension to comment resolution. Ecology concurred that an extension will be granted, although it has not been transmitted to DOE-RL.

No. 25 – DOE-RL noted that a draft 100-NR-2 RD/RA work plan was submitted to Ecology. Ecology stated that comments were sent to DOE-RL last week.

Nos. 26-40 – DOE-RL stated that these items are associated with revising the sampling and analysis plans (SAPs), and that several of the SAPs are awaiting Ecology review. Ecology stated that the intent was to turn the SAPs around quickly, but it was not aware that the first submittal would include seven SAPs when a 30-day turnaround was discussed. Ecology added that it does not have the resources to turn around seven SAPs in 30 days. DOE-RL noted that the contractor was incentivized to revise all the SAPs this year, which was completed by the contractor, and the consequence was the initial submittal of seven SAPs. Ecology acknowledged and agreed with DOE-RL's efforts, adding that the team should not be held responsible for a 30-day turnaround. DOE-RL acknowledged Ecology's limited resources. Ecology stated that four of the SAPs are

under review, and the plan is to send comments to DOE-RL between the middle to the end of January 2016. DOE-RL noted that more SAPs will be transmitted to Ecology for review in the next two weeks. Ecology responded that a plan will be developed for turning around those SAPs.

DOE-RL noted that the 200-BP-5/PO-1 SAP was put on hold until the RI was sent to Ecology, and that the RI has been submitted. DOE-RL acknowledged there are some issues with the modeling, and asked if Ecology could provide comments on the SAP. Ecology responded that comments would not be provided on the SAP until the RI is finalized. Ecology noted that part of the modeling is based on risk, and the SAP will not be addressed until comments on the RI are resolved. DOE-RL stated that Ecology's statement was different from the status given during the 200 Area unit managers meeting, and that DOE-RL would follow up internally regarding Ecology's position.

#### **PFM Closure Project - TPA Milestone M-083**

Milestone Summary - DOE-RL stated that M-083-44 was completed by moving all of the pencil tanks out and isolating the glove boxes. DOE-RL expressed appreciation to Ecology for helping to better define what could be done during the interim status while moving towards the final slab-on-grade effort. DOE-RL stated that target milestone M-083-24-T01 is on schedule, and it is actively working with Ecology to complete the milestone. DOE-RL reported that M-083-00A is still considered at risk, but it will not be asking for relief on the milestone while efforts continue to safely meet the milestone.

Accomplishments 4<sup>th</sup> Quarter 2015 – DOE-RL pointed out that the completion of the HC-9B glove box size-reduction was significant since it was the first of the two high-risk glove boxes. DOE-RL provided color photos depicting the progress with the HA-9A glove box, which is the last high risk glove box, and it is on track to be completed in January 2016. DOE-RL stated that cleanout of the Plutonium Reclamation Facility (PRF) canyon floor pan is nearing completion. DOE-RL reported that all 12 tanks in 242-Z have been isolated, and 90 percent of the piping has been moved, with 70 percent of the piping size-reduced. The bulk area cleanout and final lock down are on track to be completed in 242-Z. DOE-RL noted that the significance of completing removal of the glove boxes in 242-Z, the PRF canyon work and the two high risk glove boxes is that the risk to the workers is reduced. DOE-RL added that those high-hazard jobs should be completed by the end of the coming quarter.

DOE-RL noted that energy radiation mapping of the PRF canyon was done to determine where scabbling of the walls might be needed. The radiation mapping device is called a gray cube, and it revealed that the radiation is evenly dispersed throughout, but at lower levels. DOE-RL

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indicated that instead of doing massive scabbling, which posed some concerns, the canyon walls may be decontaminated with a power washer.

DOE-RL reported that the exterior pad areas for what are called the ERDF cans have been completed. DOE-RL added that it is in the process of going cold and dark in the ancillary facilities, and the crews may be able to start taking some of them out in the January/February 2016 time frame. DOE-RL noted that removal of ancillary facilities will free up space on the ground to take out the PRF facility.

Project Baseline Performance – DOE-RL noted the contract-to-date negative cost and schedule variances, but pointed out that progress is being made regarding schedule recovery, with a fiscal year to date positive schedule variance. DOE-RL added that the project is under budget for the fiscal year to date, due to efficiencies gained with completion of the pencil tanks. DOE-RL noted that PFP is a high priority for DOE-RL, and there is sufficient funding for 2016.

Issues/Challenges – Regulatory - DOE-RL stated that it has been working with Ecology to develop the end-point criteria checklists, and that Ecology has reviewed some of the checklists. The goal is to complete the checklists by the end of January 2016.

Issues/Challenges - Non-Regulatory – DOE-RL noted that the importance of the documented safety analysis (DSA) Rev. 12 is that it will allow the demolition of the facility. DOE-RL stated that Rev. 12 is currently being implemented, which will allow the sides of the facility to be opened up, with some interim plastic boundaries for air control. The crew will then be able to proceed with removal of the waste from the duct level, which will allow more flexibility in what can and cannot be done. DOE-RL reported that the readiness assessment for preparation of demolition is scheduled for the second week in February 2016.

Planned Activities through March 2016 – DOE-RL noted that a number of the planned activities for the PRF canyon (236-Z facility) are currently being done. DOE-RL stated that the south canyon airlock should be reactivated in the next few weeks, which will provide easier access for bringing equipment into and out of the canyon. DOE-RL noted that the canyon floor pans were sloped, and the canyon floor will be grouted to provide a level surface for the high reach equipment and to reduce the shine from the floor. DOE-RL stated that demolition of the 236-Z facility is currently scheduled to start by late March 2016. DOE-RL reported that it is within four to five weeks of preparing the 242-Z facility for demolition, followed by the 236-Z facility.

DOE-RL stated that the crews are in the process of removing the exhaust ventilation from the glove boxes and the rooms, and removing the process transfer lines in 234-5Z. DOE-RL noted that the asbestos abatement is nearing completion. DOE-RL stated that the current schedule for starting demolition of 234-5Z is late June, mid-July 2016.

DOE-RL reported that the mockup to remove the 26-inch process line has been completed for the 291-Z facility, but the workers have been shifted due to other needs and resource limitations. DOE-RL noted that the importance of removing the process line will enable the facility to go criticality incredible and will present more of an industrial facility for demolition.

PFPP Timeline – Updated Forecast – DOE-RL noted that 243-Z has been taken out, and the sequence for taking the facilities out will be 236-Z, 242-Z, 234-5Z and 291-Z.

**Soil and Groundwater Remediation Project Milestone Review - M-015-00, M-016-00, M-024-00, M-085-00**

Accomplishments – (4<sup>th</sup> Quarter 2015) River Corridor - DOE-RL stated that the status in today's handout is through the fourth quarter ending September 30, 2015, and updates will be provided on the progress since that time. DOE-RL noted that the work completed on two cultural resource reviews for 100-NR-2 were associated with putting in wells in the revegetated area, and that a lot of progress has been made. DOE-RL indicated that the tribes are about ready to sign the five Memorandum of Agreements (MOAs), and that two of them are for NR-2. DOE-RL added that the old tent pump and treatment building that is not being used will undergo D&D, and the MOAs are also addressing that effort. DOE-RL noted that the 100-FR-3 RD/RA work plan was approved by EPA, and it will be implemented from the Record of Decision (ROD).

DOE-RL reported that the remedial action is being implemented in the 300 Area, and stage A has been completed. Core samples will be pulled and leaching studies will be done to determine the effectiveness of the injections. DOE-RL noted that the injections went down into the vadose zone with wells, and infiltration areas were done six feet down and then allowed gravity to drain it down. The sampling has not been completed, and PNNL will be doing leach testing along with some monitoring as the groundwater goes towards the river. Oregon Department of Energy (ODOE) asked when the results will come back from the lab, noting that it had been indicated there is a 120-day turnaround, which sounded like a long time. DOE-RL responded that if ODOE had heard 120 days, that was probably the time frame. DOE-RL added that there will be some preliminary results to evaluate, but that it would be some time before the final report was completed.

Accomplishments (4<sup>th</sup> Quarter 2015) Central Plateau – DOE-RL reported that the unattended operations started up for the 200-UP-1 uranium extraction and treatment system, which means that it runs unattended over the weekends when no one is at the facility. The facility is manned on day shift Monday through Thursday. DOE-RL stated that a letter will be sent to Ecology that milestone M-016-191 was completed. DOE-RL noted that all of the wells are running at required flowrates, and uranium is being removed from the 200-UP-1 Area as well as through the 200-BP-5 treatability test. DOE-RL added that M-016-190 was completed by constructing the iodine injection wells and the uranium wells. DOE-RL noted that the M-016-190 milestone does not include the hookup and operation of the wells.

DOE-RL reported that the 200-BP-5 treatability test was initiated last quarter, and the drawdown test has been completed, which had a good result. DOE-RL noted that once the test was stopped, it didn't take much to rebound since it didn't draw down very much. The pumping was started back up to avoid the line freezing during the colder weather, and it is continuing under the

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treatability test. DOE-RL stated that it is working with Ecology on the EE/CA. Ecology concurred that good progress is being made on the EE/CA. DOE-RL noted that the EE/CA will be a removal action to authorize continued pumping and treating at 200 West until a ROD is in place, or that other criteria is being built into the EE/CA. Ecology stated that performance criteria are being added to define what will be done when and if pumping is stopped before the ROD is in place. DOE-RL indicated that pumping should continue until the ROD, and that the ROD would probably call for continued pumping.

DOE-RL reported that two new perched water wells were constructed at 200-DV-1 where the one well is located, and testing was initiated this week. DOE-RL stated that most of the testing is software type of testing, and once it's completed some drawdown testing will be done on each of the three wells. DOE-RL noted that three wells may not provide three times the extraction rate of the one well, which was getting about 1,600 to 1,800 gallons per week. Efforts are under way to start the drawdown testing, and initially the perched water will be sent over to the Effluent Treatment Facility (ETF), but the intent is to eventually pipe it into the 200-BP-5 pipe once there is a constant flow from both BP-5 wells. DOE-RL stated that the goal is to stop sending water to ETF so that ORP can retool the facility and use it for their needs. There will also be a labor cost saving by not trucking the water over to ETF.

DOE-RL stated that the 200-WA-1 draft B RD/RA work plan was submitted to EPA for review, it is working with EPA to finalize the work plan. DOE-RL noted there are some concerns about how the waste sites behind PFP and U-Plant will be handled, and that will be the initial focus so that U-Plant demolition can continue.

#### Milestone Summary:

DOE-RL noted that most of the milestones are under the tentative agreement. Ecology stated that the public comment period for the tentative agreement milestones ends sometime in January 2016, and it is anticipated that the responsiveness summary will not take very long. Ecology noted that there has not been a discussion regarding the TBD dates, and an internal discussion with senior management in Lacey, WA, will be needed before scheduling any discussions at the local level.

The following milestones were updated:

M-015-112 – DOE-RL noted that the dispute associated with the 200-IS-1 work plan was discussed under key documents.

M-015-98 – DOE-RL noted that this milestone is associated with the U-Plant waste site that was just discussed (see 200-WA-1 draft B RD/RA work plan under accomplishments 4<sup>th</sup> quarter for Central Plateau).

M-016-191/192 – DOE-RL noted that these two milestones are complete. A letter is being prepared regarding 191, and a completion letter has been sent for 192.

Project Baseline Performance – DOE-RL stated that the project is basically on schedule and within budget. DOE-RL noted that a lot of the schedule variances are due to work that was accelerated from the out years.

Planned Activities – October 2015 - March 2016:

DOE-RL noted that the 200-BP-5 treatability test was completed, and treatment is continuing at 200-BP-5. Construction of the truck unloading station at the 200 West pump and treat facility was completed during the first quarter of FY 2016, and the intent is to start using the station with the drawdown test on the perched water in January 2016. DOE-RL stated that monitoring of the iodine hydraulic containment will be a continuous activity from now on.

DOE-RL stated that the 300-FF-5 Stage A uranium sequestration was completed, and preparations will be made to start up Stage B. DOE-RL noted that workshops are scheduled in January 2016 to finalize the 200-BP-5 RI report. Ecology inquired about inclusion of the 200-BP-5 EE/CA for the planned activities. DOE-RL responded that the planned activities list is not all-inclusive, but the EE/CA is being worked. Ecology inquired about DOE-RL's plans to send a letter in January 2016 regarding finalizing the 200-DV-1 RI/FS work plan. DOE-RL responded that the goal is to work towards finalizing the 200-SW-2, 200-DV-1 and 200-WA-1/200-BC-1 work plans, and that both parties are progressing with their efforts on the work plans.

**100-K Sludge Treatment Project, Soil Remediation, D4 and ISS - M-016 and M-093 TPA Milestones**

Accomplishments – 4<sup>th</sup> Quarter 2015:

Sludge Treatment Project – DOE-RL noted that it is starting to call the sludge treatment project the sludge removal project, and at this time the sludge is being removed and is not being treated.

Construction - DOE-RL reported that construction of the annex facility has been completed, and construction acceptance testing has been ongoing since about the August 2015 time frame. The main power to the facility has been brought in to replace the temporary power, and that allowed the acceptance testing to continue. The contractor is going through the punch list of items to correct as a result of the testing and inspection of the system installations, and they are down to about 30 punch list items. DOE-RL stated that the contractor will be finishing up the fire suppression system testing in January 2016, and the annex will be completed except for the installation of the equipment to be used for the sludge transfer.

DOE-RL reported that a contract was awarded for re-lidding of the engineered containers in the K West basin. The re-lidding will allow the insertion of the ZAGO removal tool through a penetration at the top of the container, and the ZAGO tool will pump the sludge out. DOE-RL noted that the operators are being trained at the Maintenance and Storage Facility (MASF), and the procedures are being developed for sludge removal. The crew is starting to move into the basin and do the setup to allow the re-lidding to occur.

Equipment Procurement and Fabrication - DOE-RL stated that procurement of the equipment has been ongoing for the entire year, and most of the equipment required to support cold commissioning is staged at MASF. Preparations are being made to start the setup of the equipment for cold commissioning at MASF. Cold commissioning is expected to start in the March/April 2016 time frame until the summertime, and then the equipment will be dismantled and taken out to the basin for installation.

DOE-RL stated that an item of interest on the sludge project is the current DOE project management protocols to get the critical decisions approved since it is now in the 2015 budget as a capital line item. DOE-RL noted that going through the formal approval process does not affect anything that is being done on the project.

MASF Preoperational Acceptance Testing (MPAT) - DOE-RL noted that there were several high-level visits to MASF this past summer, and that MASF sets the standard for projects at other sites since they do not have full-scale mockup test facilities. DOE-RL added that having the full-scale mockup facility adds to the confidence going forward with executing the sludge transfer project.

100-KE Characterization Wells – DOE-RL stated that the characterization wells have been installed, and the borehole data and samples have been received. The data and results are being analyzed, and a briefing will be provided at the unit managers meeting. DOE-RL reported that high contaminated cesium/strontium soils were found at about the bottom of the fuel storage basin (UPR-100-K-1), but the concentrations decreased as the sampling went deeper. The deep vadose zone, which is at the water table, had high strontium/cesium and no detectable tritium in the soil. DOE-RL noted that those results are consistent with past data. The groundwater results showed elevated strontium, carbon 14 and tritium.

DOE-RL stated that the well that was drilled at the 116-KE-1 site had lower levels of contamination, as expected. The upper vadose zone had low strontium 90 and some cesium. DOE-RL added that deeper into the vadose zone, just above the water table, there was higher strontium and low cesium contamination and some tritium in the soils, which is consistent with what was expected.

Milestone Summary – DOE-RL stated that all of the milestones are on schedule, and there are no issues anticipated with meeting the first milestone to complete installation of the sludge transfer equipment.

Project Baseline Performance – DOE-RL stated that the spent fuel project (RL-12) is basically on schedule, and the negative cost variance is mainly due to issues with construction of the annex that occurred a couple years ago. DOE-RL added that as it moves forward with setting up the baseline, the performance will be measured against the new baseline. DOE-RL stated that there is nothing significant to report under RL-41.

Planned Activities September 2015 – March 2016:

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Sludge Treatment Project - DOE-RL noted a slight correction to today's handout under the first bullet that should read "add segregated settler material to engineered container 220" instead of settle material. DOE-RL stated that there are some materials in a type of bucket in the basin, and that will be transferred into the engineered container.

#### **Hanford Lifecycle Scope, Schedule, Cost Report - TPA Milestone M-036-01**

DOE-RL reported that there are no issues related to the development of the 2016 Lifecycle report, and that it will be issued to Ecology and EPA by January 31, 2016. DOE-RL noted that there was a disagreement about whether or not to include an alternatives analysis for the cesium/strontium capsule storage in the Lifecycle report. DOE-RL stated that the issue was subsequently resolved during a senior management meeting, and the Lifecycle report will not include that specific alternatives analysis.

#### **River Corridor Closure Project - Milestones M-16/M-89//M-94**

Quarterly Summary (4<sup>th</sup> Quarter 2015) – DOE-RL noted that milestone M-16-69 was met to complete all the 300 Area interim remedial actions.

#### Milestone Status:

M-16-149 – DOE-RL stated that this milestone is at risk, and a TPA change request was submitted to move the date out a year, which was rejected by EPA. DOE-RL noted that all of the waste sites under the milestone have been completed with the exception of the Gable Mountain waste site that is associated with the firing range. DOE-RL stated that it will be invoking a dispute at the project manager level. EPA responded that a one-year extension had already been granted, and the expectation is that DOE-RL could still complete the milestone by sampling the waste site as required. EPA reiterated its position that DOE-RL does not need to enter into the administrative process associated with the National Historic Preservation Act, and that is holding DOE-RL up from meeting the milestone. EPA stated its perspective is to not keep the dispute at the project manager level for very long, since there is nothing to dispute.

DOE-RL stated that it is moving forward with getting the cultural clearances that are needed, and it expects a Memorandum of Agreement (MOA) with the Tribes under the Site Historic Preservation Office (SHPO). DOE-RL added that sampling would be done under an approved sampling and analysis plan (SAP) to determine if the site passes the cleanup requirements, and then close the site under CERCLA. DOE-RL noted that it will be a separate issue regarding a decision about whether more lead removal is needed, and it will be based on discussions with the tribes.

M-16-161 – DOE-RL stated that this milestone was on track to be completed, but it was not able to initiate work at the 600-385 culturally sensitive waste site in the 100-H Area. DOE-RL noted

that a change request was approved to move the 600-385 waste site into the 2017 milestone M-16-00A. Ecology asked if this milestone is still at risk or is now on schedule. DOE-RL responded that the milestone is now on schedule, and if the MOA is approved, the remediation should only take about one to two months. It was noted that the milestone could potentially be completed by the original March 2016 date.

M-89-06 – DOE-RL stated that it has been working with Ecology on submitting the deliverable associated with the 324 Building non-permitted mixed waste units since funding has been identified. Ecology referred to the schedule that will be included in the closure plan, and asked if an early draft could be provided before the end of the public comment period on the M-16 milestone changes. Ecology stated that the request is to ensure that the schedule is consistent with what is currently out for public comment. DOE-RL responded that a draft schedule could be provided.

#### Significant Accomplishments - For Last 3 Months:

M-16 - Remedial Action/Risk Assessment – DOE-RL reported that remediation of the vertical pipe units (VPUs) in 618-10 has been initiated, and a drill rig is being used to auger the VPUs to place overcasing. DOE-RL stated that 12 VPUs have been augered so far, and the project is running ahead of schedule. EPA asked if DOE-RL plans to have the contractor complete a process on any of the VPUs. DOE-RL responded that it does plan to have the contractor complete the process and ship the waste to either ERDF or WIPP. EPA inquired about the target for augering. DOE-RL responded that the plan is to auger at least 28 and remediate 15. DOE-RL explained that there will be a low level retrieval bucket that will be lowered into the overcasing and pull the soils out. The equipment has been received and the testing procedure is being developed, and the plan is to start removal of the soils this spring. DOE-RL noted that one of the VPU soils that was suspected to be transuranic (TRU) turned out to be low level.

DOE-RL stated that backfill and revegetation of all the waste sites in the 300 Area have been completed except for 288:2, which is the debris site across from the 300 Area where the remediation continues.

#### Significant Actions Planned – For Next 3 Months:

River Corridor Contract - DOE-RL stated that the River Corridor contract ends at the end of FY16, and the work is being transitioned to the Plateau Remediation Company (PRC). Both of the contractors will be submitting their transition plans in the next month, and then a phased turnover will be done during the year. DOE-RL noted that since 324 is in surveillance and maintenance mode, it will probably be turned over first. DOE-RL stated that PRC is gearing back up for the 300-296 waste site remediation, and a couple of the project managers will transition over to PRC, which will facilitate continuity with the project.

ERDF – DOE-RL stated that the last comments from EPA are being incorporated into the ROD amendment for in-trench treatment, and final approval is expected before the end of December 2015. DOE-RL expressed appreciation for EPA's support with the ROD amendment. DOE-RL reported that a vertical expansion of ERDF is being implemented. DOE-RL noted that instead of

building a new super cell at a cost of over \$30 million, the waste will be piled a little deeper on top, but still be within the parameters of the liner design. DOE-RL stated that it has been working with EPA to get the necessary approval, and the vertical expansion will provide almost the equivalent capacity of a super cell.

M-169 – Remedial Action/Risk Assessment – DOE-RL noted that remediation of the 288:2 waste site is being done in two phases, and the first phase should be completed in the January/February 2016 time frame. The second phase has been authorized and will be starting in parallel with the first phase, but a limiting component is the hiring of new ERDF drivers. The second phase should be completed during the summer 2016.

Performance Summary – DOE-RL reported that the project reflects a good cost and schedule performance, with a cost savings of almost \$300 million since the inception of the contract.

#### RCC Issues:

600-349 Waste Site Cultural Resource Review - DOE-RL noted that this issue was already discussed under milestone M-16-149.

600-385 Waste Site Cultural Resource Review – See discussion under M-16-161.

#### **M-091/M-026**

Accomplishments – DOE-RL reported that the final comments were incorporated into M-091-03 project management plan (PMP), which completed the June 2015 submission. DOE-RL stated that Ecology is binning and combining comments on the April 2015 M-026-01 Land Disposal Restrictions (LDR) report. DOE-RL added that when Ecology's comments are received, a schedule will be provided to Ecology regarding incorporation of all the comments into the LDR report. DOE-RL stated that an initial meeting was held for the 2016 LDR report, which will be a summary report.

DOE-RL reported that it is working towards tentative agreement (TA) milestones M-091-47A and M-091-47B, even though the milestones are proposed and have not yet been approved. DOE-RL noted that 47A has been completed to repackage 280 cubic meters of transuranic (TRU) waste, and that 179 cubic meters out of 280 cubic meters have been completed under 47B. DOE-RL added that a box was shipped off two days ago, and after it is repackaged it will meet the 2016 commitment for 47B. DOE-RL estimated that will be completed sometime in February 2016. DOE-RL noted that the M-091 waste was scheduled first under the tentative agreement milestones so that the remainder of the year could be focused on PFP waste.

DOE-RL noted a correction on page 3 of today's handout that should read M-091-51 instead of M-091-47. DOE-RL stated that a kick-off meeting was held November 30, 2015 for the engineering study/alternatives evaluation.

Milestone Status - DOE-RL stated that the milestone status provides information on the TA milestones, and the information has been provided during previous meetings.

Project Baseline Performance – DOE-RL stated that the performance cost data variances are mainly based on the previous eight years of the contract, since it is a contract-to-date view. DOE-RL noted that the previous quarter shows an increase in cost due to activities associated with receipt of sludge at T Plant and TRU waste repackaging.

Actions Planned for Next Six Months – Ecology reported that EPA had issues with three of the responses to the public comments on the proposed revision to the M-091 milestone series. Ecology stated that it revised two of the three responses and sent them back to EPA, with an explanation about why a revision was not provided on the third response. Ecology is waiting for a response from EPA.

#### **Central Plateau Remediation Project - M-016-00, M-037, M-085-00**

Accomplishments 4<sup>th</sup> Quarter 2015 – Minimum Safe Activities – DOE-RL noted that several routine surveillance and preventative maintenance activities were completed. DOE-RL stated that the activities associated with the REDOX roof repair are important since the roof will be in place for an extended period of time.

Accomplishments 4<sup>th</sup> Quarter 2015 – Additional Work – DOE-RL reported that sample analysis results are coming in for the 207A South Retention Basin closure, and a QA process will be done to review the VSP runs. DOE-RL noted that the professional engineer is drafting a report, and Ecology will be notified before the backfilling is done. Ecology stated that a public comment period is scheduled January 19, 2016, to incorporate the 207A into permit Rev. 8C, and the public comment period will go through the end of March 2016. Ecology added that it is well on the way to completing all the paperwork after all the actions have been done under the temporary authority. Ecology noted that the temporary authority expires in January 2016, and DOE-RL will need to submit an extension request to Ecology, which will extend the temporary authority for another 180 days. Ecology noted that all of the actions should be done by that time.

Milestone Summary – Ecology noted that the milestones are under the Tentative Agreement, and that a status was not needed.

Project Baseline Performance – DOE-RL stated that the project is on schedule and slightly below cost.

Planned Activities October 2015 – March 2016 – Ecology asked if the suspect plutonium nitrate bags at REDOX will end up being TRU waste. DOE-RL responded that the bags are considered suspect TRU waste, but they still need to be assayed. DOE-RL added that until the bags are assayed and proved to not be TRU waste, they will be handled as TRU waste.

Tri-Party Agreement River Corridor/Central Plateau  
 Quarterly Milestone Review  
 December 17, 2015

<u>Name</u>	<u>Organization</u>
<u>Tom Teyner</u>	<u>DOE-RL</u>
<u>Theresa Howell</u>	<u>WCH</u>
<u>Jeff Lerch</u>	<u>WCH</u>
<u>Stacy Simon</u>	<u>ODOE</u>
<u>John Price</u>	<u>ECY</u>
<u>Nina Menard</u>	<u>ECY</u>
<u>Mike Cline</u>	<u>DOE-RL</u>
<u>Ron Skinnadani</u>	<u>Ecology</u>
<u>KED MASTER</u>	<u>MIA</u>
<u>ROB PIPPO</u>	<u>MISA</u>
<u>STEPHEN KORENKIEWICZ</u>	<u>DOE-RL</u>
<u>Dennis Faller</u>	<u>WPA</u>
<u>KIM WELSCH</u>	<u>ECOLOGY</u>
<u>Ben Vannah</u>	<u>DOE-RL</u>
<u>Richard J Brown</u>	<u>ECY/NOA</u>
<u>Jane Borghese</u>	<u>CHPRL</u>
<u>Michael Collins</u>	<u>DOE-RL</u>
<u>DEB G.</u>	<u>ECY</u>
<u> </u>	<u> </u>



Fourth Quarter FY 2015  
December 17, 2015

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



**100K Sludge Treatment Project, Soil  
Remediation, D4, & ISS**  
TPA Milestone Series: M-016 and M-093

# Accomplishments

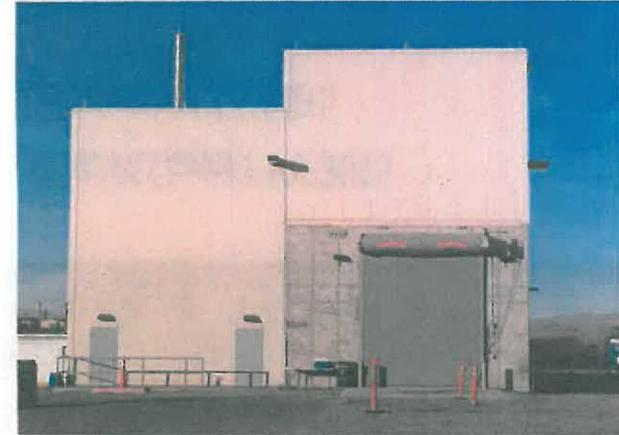
## 4<sup>th</sup> Quarter 2015

### Sludge Treatment Project

- Complete 105-KW Sludge Transfer Equipment Installation (*M-016-177, due 9/30/2017 On Schedule*)
- Begin Sludge Removal from 105-KW Fuel Storage Basin (*M-016-175, due 9/30/18 On Schedule*)

### Construction

- Completed construction of the Annex Facility.
- Power has been brought into the facility from the Main Service Disconnect.
- Awarded construction contract for 105KW Basin Engineered Container Re-lidding.



Annex Facility



Connecting power to Annex Facility

# Accomplishments

## 4<sup>th</sup> Quarter 2015

### Sludge Treatment Project (*continued*)

#### Equipment Procurement/Fabrication

- Completed procurement of First Sludge Transport and Storage Container (STSC) vessel.
- Completed procurement of ECRTS Buy-Back Procurement Set 1 (Transfer Line Service Box, Xago retrieval tool).
- Completed procurement of ECRTS Buy-Back Procurement Set 2 (Seismic Shutdown Switch, EC-230 Divider Plate).
- Completed procurement of ECRTS Buy-Back Procurement Set 3 (Sludge Booster Pump, EC Lids).



Sand Filter Skids Staged at MASF



XAGO Pump Skid

# Accomplishments

## 4<sup>th</sup> Quarter 2015

### Sludge Treatment Project (*continued*)

#### MASF Preoperational Acceptance Testing (MPAT)

- Continued preparations for cold commissioning at the Maintenance and Storage Facility (MASF) and operator training and familiarization with ECRTS components.
- Significant progress has been made to develop and obtain approval of test specifications supporting the MASF Preoperational Acceptance Testing (MPAT).



PNL-103 Interior



Decant Pump Boxes at MASF

# Accomplishments

## 4<sup>th</sup> Quarter 2015

- 100KE Characterization Wells
  - Completed characterization of UPR-100-K-1 and 116-KE-3 Waste Sites (PM-41-2)
  - 116-KE-3:
    - Completed well development and post development sampling
    - Received final characterization results
  - UPR-100-K-1:
    - Completed drilling, well construction, well development and post development sampling
    - Shipped all remaining soil and water samples

# Accomplishments

## 4<sup>th</sup> Quarter 2015

- Area AB waste site remediation
  - Started mobilization of subcontractor equipment.
- 165KE Asbestos Abatement
  - Training in process for new insulators
  - Trailer modifications underway to house new personnel
- 100K Minimum Safe Activities
  - Maintained 100K Area Minimum Safe configuration
    - Performed radiological and waste surveillances



# Milestone Summary



TPA Number	Due Date	Description	Status
M-016-177	9/30/2017	Complete 105-KW sludge transfer equipment installation	On Schedule
M-016-175	9/30/2018	Begin Sludge Removal from 105-KW Fuel Storage Basin	On Schedule
M-016-176	12/31/2019	Complete sludge removal from 105-KW Fuel Storage Basin	On Schedule
M-016-178	12/31/2019	Initiate Deactivation of 105-KW Fuel Storage Basin	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-016-173	9/30/2022	Select K Basin Sludge Treat. & Pkging Technology propose new MS's	On Schedule
M-016-181	9/30/2023	Complete Deactivation, Demolition & Removal of 105-KW FSB	On Schedule
M-016-186	12/31/2023	Initiate Soil Remediation Under 105-KW Fuel Storage Basin	On Schedule
M-016-00C	9/30/2024	Complete All Response Actions In The 100K Area	On Schedule
M-016-143	9/30/2024	Complete The Inerim Response Actions For The 100K Area Phase 2	On Schedule
M-093-27	9/30/2024	Complete 105-KE &105-KW Reactor ISS in Accordance with Removal Action Work Plan	On Schedule

# Project Baseline Performance

(Contract to date through September 2015)

RL-0012 Spent Nuclear Fuel Stabilization and Disposal	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
<b>Base Total</b>	517.1	515.7	529.9	-1.4	-14.2	728.4	758.7	-30.2	1.00	0.97

RL-0041 Nuclear Facility D&D- River Corridor	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
<b>Total</b>	137.1	137.2	108.1	0.1	29.1	219.2	186.8	32.4	1.0	1.27

Numbers are rounded to the nearest \$0.1M

# Planned Activities

September 2015 – March 2016

## Sludge Treatment Project

### Construction

- Add Segregated Settle Material to EC-220
- Complete Re-Lidding on EC 220 and EC 230.
- Complete Construction Turnover for the Annex Facility

### Equipment Procurement/Fabrication

- All Procurements/Fabrications, Specifications, and Procedures completed to support MASF Pre-Operational Acceptance Testing (MPAT).

# Planned Activities

## September 2015 – March 2016

### 100K Min Safe

- Perform radioactive material area (RMA) maintenance (postings, barriers, etc.)
- Perform Waste Information Data Systems (WIDS) surveillances at 100K

### 100K D4

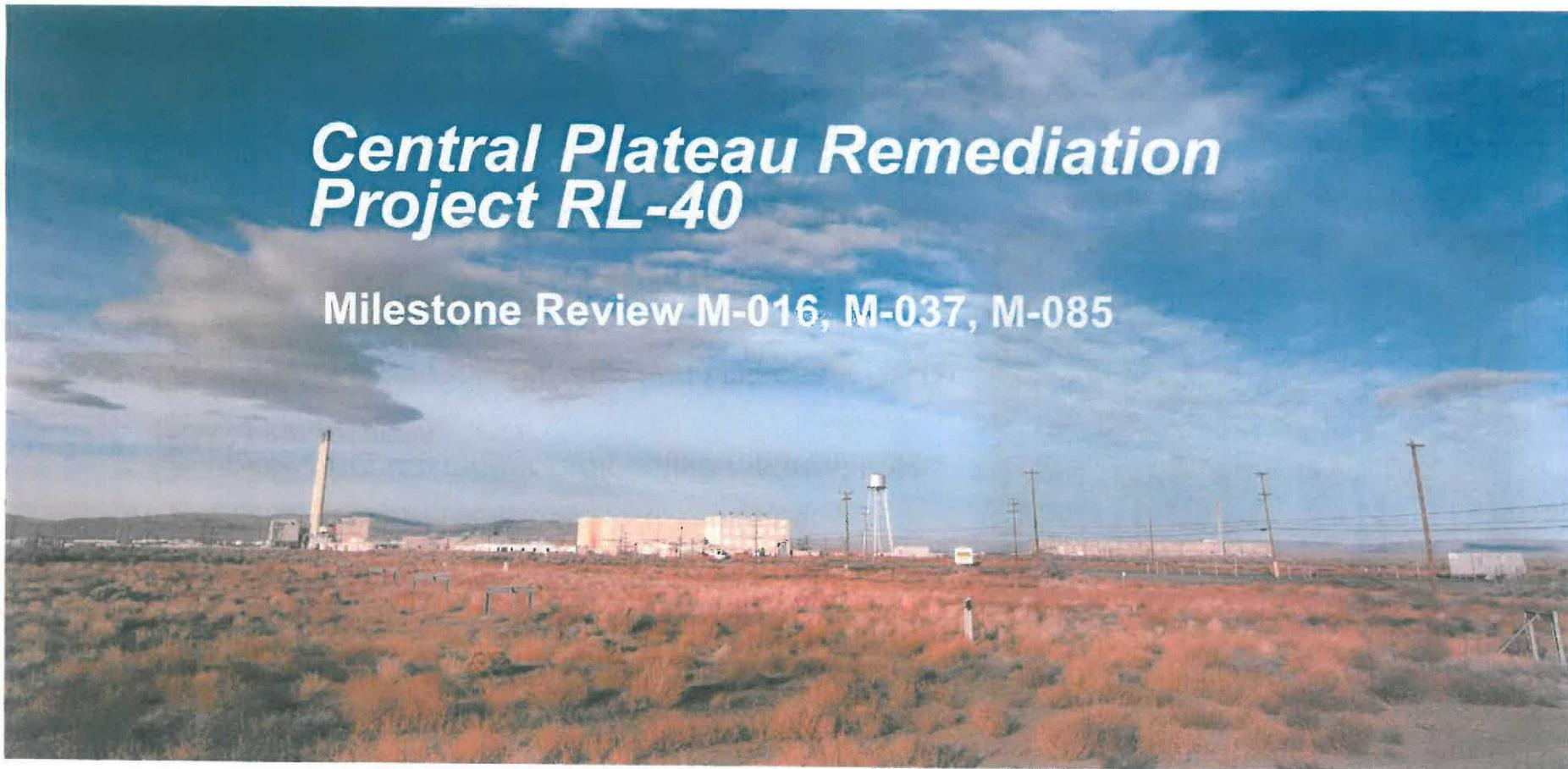
- 100K Characterization Wells
  - 116-KE-3
    - Demobilize equipment and dispose of drilling enclosure.
  - UPR-100-K-1
    - Receive final characterization results
    - Demobilize equipment and dispose of drilling enclosure

### 100K Waste Sites

- Accelerate Area AB waste site remediation
- Begin 165-KE asbestos abatement

# Central Plateau Remediation Project RL-40

Milestone Review M-016, M-037, M-085



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

Fourth Quarter FY 2015  
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# Accomplishments

## 4<sup>th</sup> Quarter 2015

### Minimum Safe/Maintenance Activities

- Completed 60 percent preliminary design for Reduction-Oxidation S Plant (REDOX) roof repair.
- Completed Annual National Emission Standards for Hazardous Air Pollutants (NESHAP) inspections at Plutonium Uranium Extraction Plant (PUREX) and B Plant.
- Performed Annual U Plant surveillance
- Performed Annual Steamline Surveillance
- Completed annual indoor radioactive material area (RMA) inspections.
- Completed Treatment, Storage and Disposal (TSD) Quarterly Site Surveillances
- Completed Quarterly Chemical Inventory.
- Completed Annual REDOX Fan Lube and Inspection



*Completed Annual REDOX Fan Lube and Inspection*

# Accomplishments

4<sup>th</sup> Quarter 2015

## Minimum Safe/Maintenance Activities

- Performed Waste Information Data System (WIDS) waste site housekeeping (tumbleweed removal, corrected posting issues).
- Completed selected Radioactive Material Area (RMA) reductions at B Plant and REDOX.
- Completed Canyon Risk Mitigation Plan.
- Down-posted RMAs at B Plant and 242 B/BL.



*Completed Annual B Plant NESHAP inspections*

# Accomplishments

4<sup>th</sup> Quarter 2015

## Minimum Safe/Maintenance Activities (cont.)

### Nuclear Safety

- Drafted 224B Criteria document for 2016 annual update.
- Received 224T Safety Evaluation Report, 15-NSD-0056.
- Completed CHPRC-1504169, HNF-14804, Revision 6 – B Plant Documented Safety Analysis 2015 Annual Update.
- Completed CHPRC-1501201, PUREX Documented Safety Analysis, CP-14977, Revision 8.
- Initiated work on single implementation plan and associated documentation to support concurrent implementation of 224-T and PUREX annual updates.

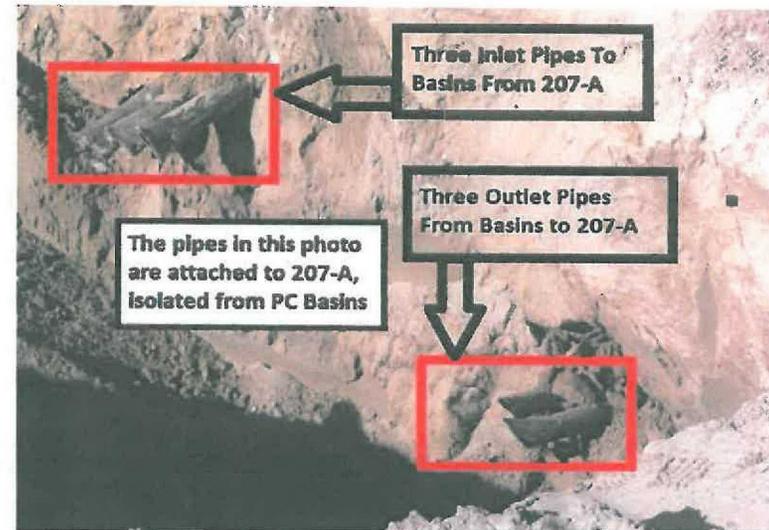
# Accomplishments

4<sup>th</sup> Quarter 2015

## Additional Work

### 207A South Retention Basin Closure

- Completed pipe and electrical isolation of 207A valve pit area.
- Initiated demolition of the 207A South Retention Basin.
- Completed waste profile at Environmental Restoration Disposal Facility (ERDF).
- Continued working completion of demolition package.
- Completed asbestos sampling.



*207A pipe isolation*

# Milestone Summary

Milestone	Due Date	Title	Status
<b>M-016-00 Complete Remedial Actions For All Non-Tank Farm &amp; Non-Canyon OUs</b>			
M-016-200A	<del>9/30/2017</del> 9/30/2021	Complete U Plant canyon (221 U Facility) demolition in accordance with the Remedial Design/Remedial Action Work Plan.	Tentative Agreement
M-016-200B	<del>9/30/2024</del> 9/30/2024	Complete U Plant (221 U Facility) barrier construction in accordance with the Remedial Design/Remedial Action Work Plan.	Tentative Agreement
M-016-250	3/31/2016	Develop a three year rolling prioritized schedule consistent with site-wide clean-up priorities to implement waste site removal actions	Tentative Agreement
<b>M-037 TSD Closure Activities</b>			
M-037-10	9/30/2020	Complete Unit-Specific Closure Requirements According To The Closure Plan(s) For <del>six (6) seven (7)</del> TSD Units: 207-A South Retention Basin, 216-A- 29 Ditch, 216-A-36B Crib, 216-A-37-1 Crib, 216-B- 63 Trench, <u>and</u> Hexone Storage and Treatment Facility (276-S-141/142), <del>and 241-CX Tank System (241-CX-70/71/72).</del>	Tentative Agreement
M-037-11	<del>9/30/2016</del> 9/30/2021	Complete unit-specific closure requirements for two (2) TSD Units: 216-B-3 Main Pond system and 216-S-10 Pond and Ditch.	Tentative Agreement
P-037-12	9/30/2022	Complete unit specific closure requirements for NRDWL, SWL and 400 Are WM FSF and ISA.	Tentative Agreement
P-037-13	9/30/2022	Complete unit specific closure requirements for 241-CX Tank System	Tentative Agreement

**Note:**

Tentative Agreement deletions are shown in strikethrough  
Proposed milestone start with a P

# Milestone Summary

Milestone	Due Date	Title	Status
<b>M-085-00 Complete Response Actions for Specified Canyon Facilities &amp; Waste Sites</b>			
M-085-01	9/30/2022	Submit a Change Package to Establish Date for Major Milestone M-085-00.	On Schedule
P-085-72	9/30/2020	Submit Removal Action Work Plan for 224-B to Ecology.	Tentative Agreement
P-085-74	6/30/2018	Submit engineering evaluation/cost analysis (EE/CA) to Ecology for a non-time-critical removal action to address high priority cleanup for B Plant Canyon in the 200-CB-1 operable unit.	Tentative Agreement
P-085-76	9/30/2025	Initiate response actions in accordance with action memorandum for a non-time-critical removal action to address high priority cleanup for B Plant Canyon in the 200-CB-1 operable unit.	Tentative Agreement
P-085-82	12/31/2017	Submit engineering evaluation/cost analysis (EE/CA) to Ecology for a non-time-critical removal action to address high priority cleanup for the PUREX Plant in the 200-CP-1 operable unit.	Tentative Agreement
P-085-84	9/30/2025	Initiate response actions in accordance with action memorandum for a non-time-critical removal action to address high priority cleanup for the PUREX Plant in the 200-CP-1 operable unit.	Tentative Agreement
P-085-100	9/30/2020	Submit Removal Action Work Plan for 224-T to EPA.	Tentative Agreement

**Note:**

Tentative Agreement deletions are shown in ~~strikeout~~  
Proposed milestone start with a P

# Project Baseline Performance

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
<b>Total</b>	116.5	116.4	103.1	-0.1	13.2	188.9	172.1	16.8	1.00	1.13

Numbers are rounded to the nearest \$0.1M

## Planned Activities

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### October 2015 – March 2016

- Complete Annual 224-T Surveillance.
- Replace doors at 242-B/BL.
- Continue Beryllium assessments.
- Continue Fire Protection assessments.
- Complete REDOX Annual Surveillance.
- Complete Annual CX-70/71/72 Surveillance.
- Complete REDOX Vent and Balance Testing.

## Planned Activities

### October 2015 – March 2016 (Continued)

- Complete clean closure of 207-A Retention Basin.
- Develop Canyon Risk Mitigation plan for prioritization
- Initiate the planning for removal of suspect plutonium nitrate bags at REDOX.
- Initiate the planning and demolition of high risk facilities at REDOX facilities including 2710S, 2711S, and 2718S.
- Complete REDOX roof design.



*207A South Retention Basin demolition*

# *PFP Closure Project*

*TPA Milestone Series: M-083*



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

4<sup>th</sup> Quarter FY 2015  
December 17, 2015



U.S. DEPARTMENT OF  
**ENERGY**

# Milestone Summary

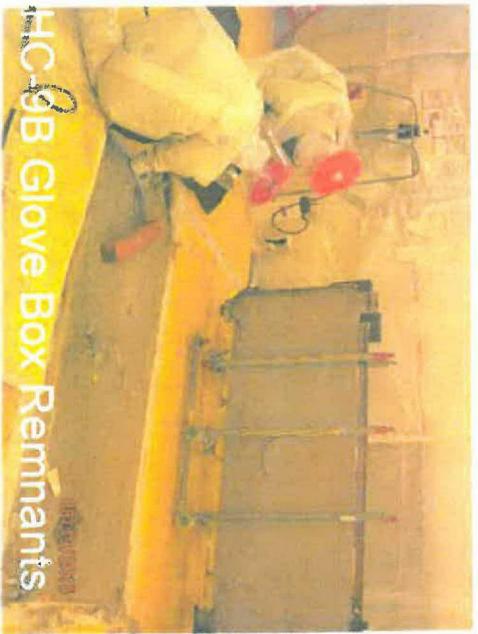
Milestone/ Target Date	Due Date	Status	Description
M-083-00A	9/30/2016	At Risk	Complete PFP Facility Transition & Selected Disposition Activities. Completion Of This Major Milestone Includes The Following Key Elements: 1) Completion Of All Activities Necessary To Achieve End Point Criteria Established 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. Note: Also See "Description/Justification" Contained In Change Form M-83-01-03.
M-083-24-T01	6/30/2016	On Schedule	Submit Revision 0 of the PFP Complex Surveillance and Maintenance (S&M) Plan to Ecology.
M-083-44	9/30/2015	Complete	Complete significant progress on deactivation and removal of 208 glove boxes and disposal of all 236-Z pencil tanks in preparation for demolition.

## Accomplishments 4<sup>th</sup> Quarter 2015

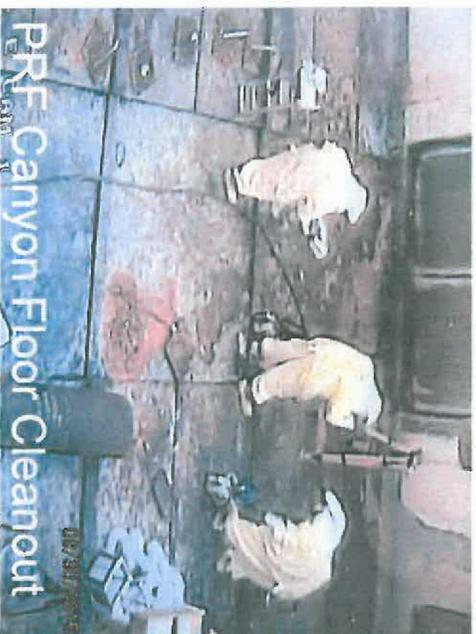
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- Milestone M-083-44 completed (progress on glove boxes & pencil tanks)
- Glove box HC-9B size reduction completed
- PRF canyon floor pan cleanout began
- All glove boxes removed from 242-Z
- 243-Z demolished
- Savannah River National Laboratory radiation mapping device deployed inside PRF canyon

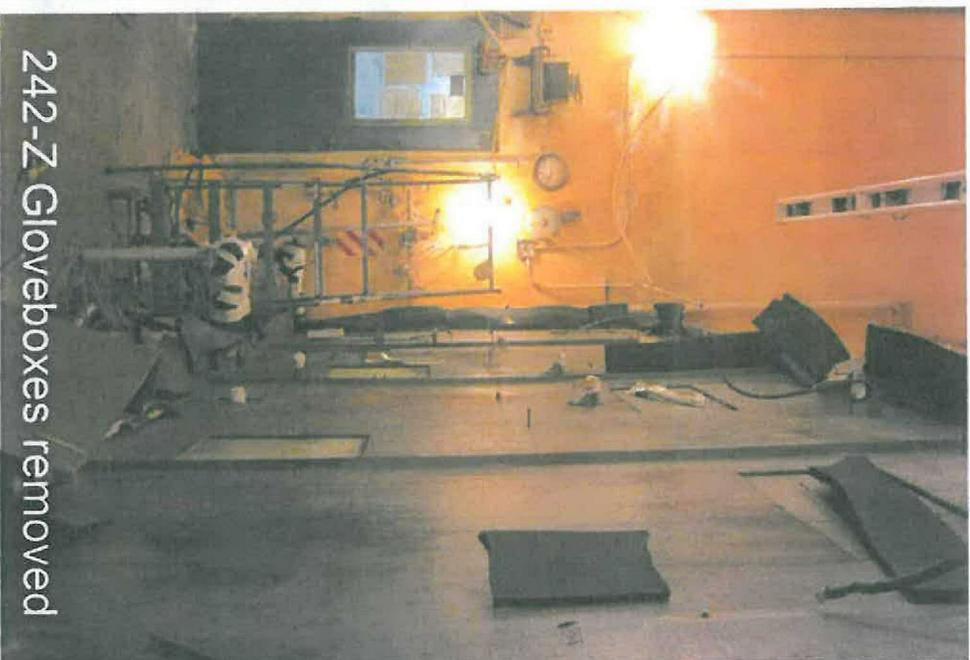
Accomplishments 4<sup>th</sup> Quarter 2015



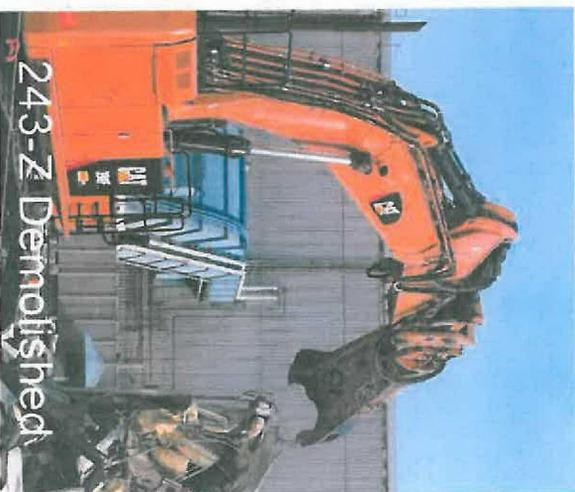
HC-9B Glove Box Remnants



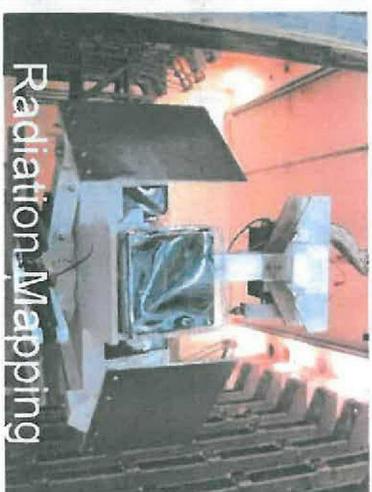
PRF Canyon Floor Cleanup



242-Z Gloveboxes removed



243-Z Demolished



Radiation Mapping

# Project Baseline Performance

## Contract to Date (Through September 2015)

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)
<b>Total</b>	\$863,471	\$836,251	\$842,796	(\$27,220)	-3.1%	(\$6,545)	-0.7%	\$969,816	\$961,335	\$8,481

## Fiscal Year to Date (Through September 2015)

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 (%)
<b>Total</b>	\$131,615	\$137,062	\$105,921	\$5,447	4.1%	\$31,141	22.7%

## Issues/Challenges

---

### Regulatory (*heads up*)

- *Development of end point criteria checklists to document applicability and completion of end points to achieve slab on grade*

### Non-Regulatory

- *Implementation of DSA revision 12*
- *Readiness Assessment for Preparation of Demolition*
- *Performance of high hazard work with uncertainty about conditions*

## Planned Activities Through March 2016

### 236-Z (PRF)

- Reactivate South Canyon Airlock
- Complete canyon floor cleanout
- Complete canyon walls and floor characterization
- Grout canyon floor
- Decontaminate canyon walls if deemed necessary based on characterization results
- Complete draining of chemical lines
- Remove process piping, isolate filter boxes, and remove E4 ducting
- Prepare column and MT glove boxes for extraction during demolition
- Complete facility characterization and complete asbestos removal as needed
- Complete Demolition Readiness Assessment
- Complete cold and dark planning
- Prepare facility for demolition

### 242-Z (Americium Facility)

- Complete tank room field work and place all tanks in ready for demo condition
- Complete characterization field work and prepare reports
- Complete cold and dark planning and prepare for demolition

## Planned Activities Through March 2016

### 234-5Z (RMA/RMC and Backside Rooms)

- Complete in situ size reduction of HA-9A glove box
- Remove ventilation, process piping and ducting from first floor
- Characterize facility and remove asbestos as needed

### 234-5Z (Duct Level)

- Continue E3/E4 exhaust systems, filters, and filter boxes removal activities
- Remove friable asbestos
- Drain remaining chemical lines

### 291-Z

- Initiate sump characterization
- Complete 26 inch process vacuum line removal (enable Criticality Incredible)
- Characterize facility and remove asbestos as needed

## PFP Timeline – Updated Forecast

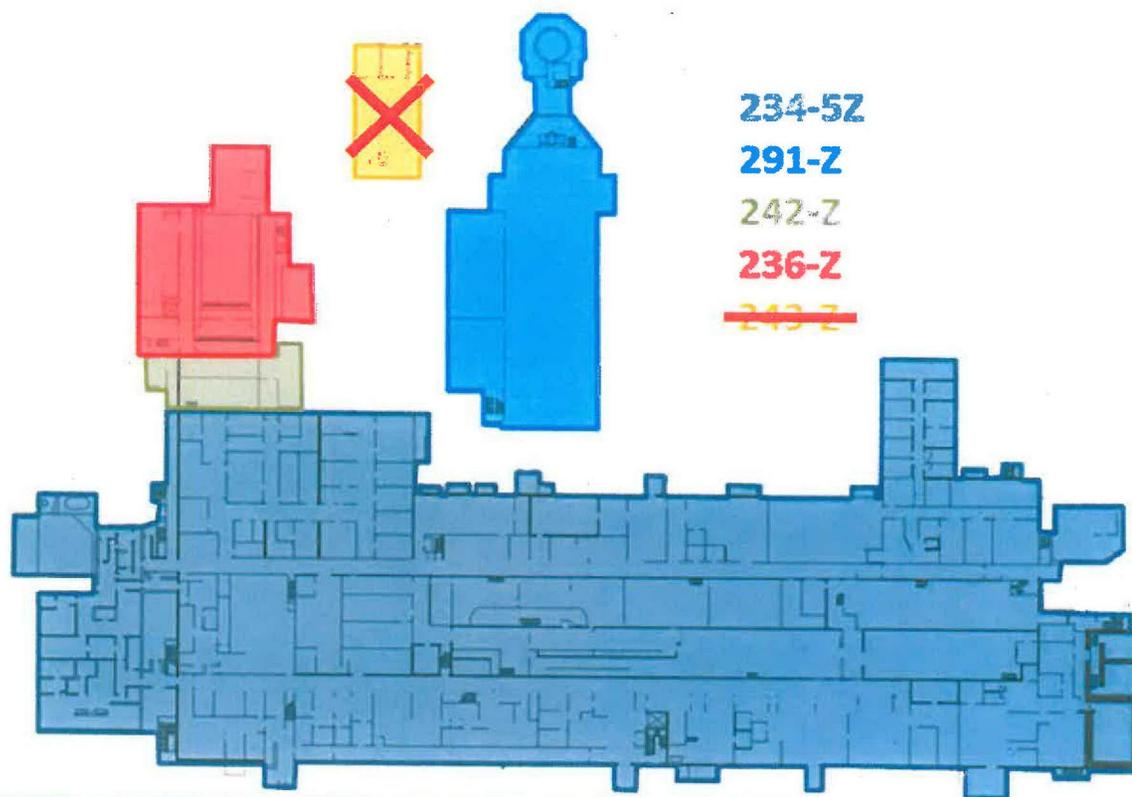
- Spring/Summer 2016: Demolition of nuclear facilities begins for:

236-Z

242-Z

234-5Z

291-Z





U.S. Department of Energy  
U.S. Environmental Protection Agency  
State of Washington, Department of Ecology  
Fourth Quarter FY 2015  
December 17, 2015



**Soil and Groundwater Remediation  
Project Milestone Review**  
M-015, M-016, M-024, M-085

# Accomplishments

## 4<sup>th</sup> Quarter 2015

### River Corridor

- 100-BC-5:
  - Transmitted Rev 2, Draft A Groundwater Sampling Analysis Plan to EPA for review on October 1, 2015
- 100-NR-2:
  - Completed work on two Cultural Resource Reviews and related Memoranda of Agreement.
- 100-FR-3:
  - EPA approved the Rev. 0 Remedial Design Report/Remedial Action Work Plan on August 18, 2015
- 300 Area:
  - Issued the Rev 2, 300-FF-5 OU Waste Management Plan
  - Issued the Rev 0, 300-FF-5 OU Remedy Implementation Sampling Analysis Plan
  - Implementing remedial action



*S&GRP accelerated drilling in Q4 and drilled 36 wells. This well in the 300 area was drilled using a Sonic drill rig.*

# Accomplishments

## 4<sup>th</sup> Quarter 2015

### Central Plateau

- 200-UP-1:
  - Began unattended operations of the uranium extraction and treatment system to treat uranium contaminated groundwater
  - Completed the construction of all three I-129 injection wells to meet TPA Milestone M-016-190 to complete the installation of extraction and injection wells for the U Plant U-/Tc-99 and I-129 plume remedies and turnover to operations for OTP
- 200-BP-5
  - Transmitted the Draft A 200-BP-5 Remedial Investigation report and 200-PO-1 Remediation Investigation supplement report to Ecology for review on August 11, 2015
  - Completed construction of the pipeline from the 200-BP-5 wells to the 200 West P&T Facility
  - Initiated the 200-BP-5 Treatability Test



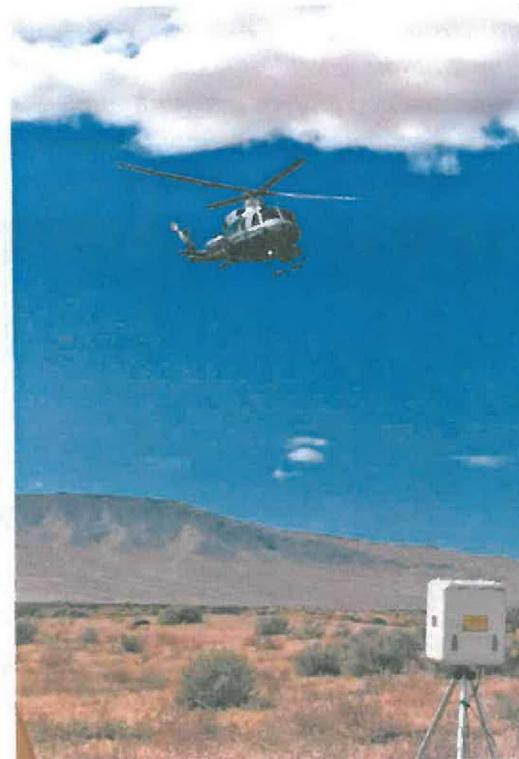
*Dr. Monica Regalbuto, Assistant Secretary for Environmental Management and Stacy Charboneau, Department of Energy Richland Operations Office Manager, visit the radiological building at the 200 West Pump & Treat, where the newly operational uranium treatment train is operating.*

# Accomplishments

## 4<sup>th</sup> Quarter 2015

### Central Plateau (continued)

- 200-SW-2:
  - Completed aerial radiation survey field activities
- 200-DV-1:
  - Initiated construction of two new perched water removal stations and retrofit of the original station
  - Initiated deep vadose characterization at the BY Cribs
- 200-BC-1/200-WA-1:
  - Submitted the Draft B RI/FS work plan to EPA for review
- 200-PW-1/3/6 & 200-CW-5:
  - Submitted the Draft B RD/RA work plan to EPA for review



*Radiological surveys were conducted from the air on waste burial grounds in central Hanford as a step toward developing an environmental cleanup plan for the project.*

# Milestone Summary

TPA Number	Milestone or Target Date	Description	Status
M-015-00*	<del>4/23/2016</del> 6/30/26	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-085.	Tentative Agreement
M-015-112	2/28/14	Submit Draft B 200-IS-1 RFI/CMS/RI/FS Work Plan to Ecology with Schedule Dates	Dispute Resolution
M-015-78	2/28/16	Complete 2 Yrs of GW and Aquifer Tube Sampling at 100-BC Expanded Monitoring Network	On Schedule
M-015-79	12/15/16	Submit CERCLA Remedial Investigation/Feasibility Study Report & Proposed Plan for 100-BC-1/2/5	On Schedule
M-015-92A	<del>6/30/15</del> 9/30/17	Submit RCRA F/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	Tentative Agreement
M-015-21A	<del>6/30/15</del> 6/30/18	Submit 200-BP-5 and 200-PO-1 OU FS Report & PP(s) to Ecology	Tentative Agreement
P-015-96	8/31/18	Submit 100-OL-1 RI report and change request for FS report to EPA and Ecology	Tentative Agreement
P-015-98	6/30/19	Complete remedial investigations of U Plant wastes sites located in 200-WA-1 in accordance with WP	Tentative Agreement
P-015-99	6/30/19	Complete remedial investigations of PFP wastes sites located in 200-WA-1 in accordance with WP	Tentative Agreement
M-015-91B	<del>12/31/15</del> 7/31/21	Submit FS Report & Proposed Plan for the 200-BC-1/200 -WA-1 OU	Tentative Agreement
M-015-92B	<del>12/31/16</del> 11/30/22	Submit RFI/CMS & RI/FS Reports & Proposed CA Decision/PP for 200-EA-1- & 200-IS-1	Tentative Agreement
P-015-92C	3/31/23	Submit RCRA F/CMS and RI/FS and PCAD/PP for 200-IS-1 to Ecology	Tentative Agreement
M-015-93B	<del>12/31/16</del> 1/31/23	Submit RCRA F/CMS & RI/FS Report & Proposed CA Decision/PP for 200-SW-2	Tentative Agreement
M-015-38B	<del>10/30/15</del> 7/31/23	Submit Rev'd-FS Report & Rev'd-PP for CW-1, CW-3 & OA-1 to EPA	Tentative Agreement
M-015-110B	<del>9/30/15</del> 9/30/23	Submit CMS & FS & Proposed Plan/CA Decision for 200-DV-1 OU	Tentative Agreement

# Milestone Summary

TPA Number	Milestone or Target Date	Description	Status
M-016-00	9/30/24 TBD	Complete remedial actions for all non-tank farm & non-canyon OUs	Tentative Agreement
M-016-125	9/30/15	Submit RD/RA Work Plan to EPA for 200-CW-5 & 200-PW-1/3/6 per ROD	Complete
M-016-190	12/29/15	Complete Installation of Wells for U-Plant Area Pump & Treat Per 200-UP-1 RD/RA WP	Complete
M-016-110-T05	12/31/15	Implement Sys To Meet Drinking Water Stds. For U at 300-FF-5 OU	Complete
M-016-191	3/30/16	Complete Acceptance/Operation Test Procedures and Initiate Operations of U Plant Area Pump & Treat	On Schedule
M-016-192	6/17/16	Submit the I-129 Technology Evaluation Plan Draft A per 200-UP-1 RD/RA WP	On Schedule
M-016-110-T03	12/31/16	Take Actions To Contain Sr-90 GW Plume at 100-NR-2 OU	On Schedule
M-016-110-T04	12/31/16	Implement Remedial Actions in All 100A RODS For GW Ous	On Schedule
M-016-00B	9/30/18	Complete all interim 300 Area Remedial Actions but not including 618-11 and 300-296	Tentative Agreement
P-016-85	9/30/21	Complete remedial actions for 300-296 and final disposition of 324 Building and Ancillary Facilities	Tentative Agreement

# Milestone Summary

<b>M-024-00O</b>	<b>TBD</b>	<b>Complete Well installations with RCRA/CERCLA Requirements</b>	<b>In Program Planning</b>
M-024-66	12/31/15	Complete Construction of All Wells Listed for CY 2015 and Before as Identified in M-24-12-01	Complete
M-024-58I	6/1/16	Initiate Discussions of Well Commitments	On Schedule
M-024-67-T01	8/1/16	Conclude Discussions of Well Commitments	On Schedule
M-024-67	12/31/16	Complete Construction of All Wells Listed for CY 2016 and Before as Identified in M-24-13-01	On Schedule
M-024-58J	6/1/17	Initiate Discussions of Well Commitments	On Schedule
M-024-68-T01	8/1/17	Conclude Discussions of Well Commitments initiated under M-024-58	On Schedule
M-024-68	12/31/17	Complete Construction of All Wells Listed for CY 2017 and Before as Identified in M-024-14-01	On Schedule
M-024-58K	6/1/18	Initiate Discussions of Well Commitments	On Schedule
M-024-69-T01	8/1/18	Conclude Discussions of Well Commitments initiated under M-024-58	On Schedule
M-024-69	12/31/18	DOE shall complete the construction of all wells listed for calendar year 2018 and before, as identified in TPA CP M-24-15-01	On Schedule
<b>M-085-00</b>	<b>TBD</b>	<b>Complete Response Actions for Specified Canyon Fac. &amp; Waste Sites</b>	<b>In Program Planning</b>
M-085-02	9/30/15	Submit Change Package to Establish Schedule for Submittal of R/VFS Work Plans for 200-CB-1, 200-CP-2, and 200-CR-1 OUs and a schedule for submittal of the RAWPs for 224B and 224T Plutonium Concentration Facilities	Complete
P-085-70	9/30/19	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CB-1 to Ecology	Tentative Agreement
P-085-80	9/30/20	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CP-1 to Ecology	Tentative Agreement
P-085-90	9/30/21	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CR-1 to EPA	Tentative Agreement

# Project Baseline Performance

Through September 2015

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)
<b>Total</b>	1,154.9	1,147.3	1,127.4	-7.5	-0.7%	20.0	1.7%	1,564.1	1,511.4	52.7

Numbers are rounded to the nearest \$0.1 million.

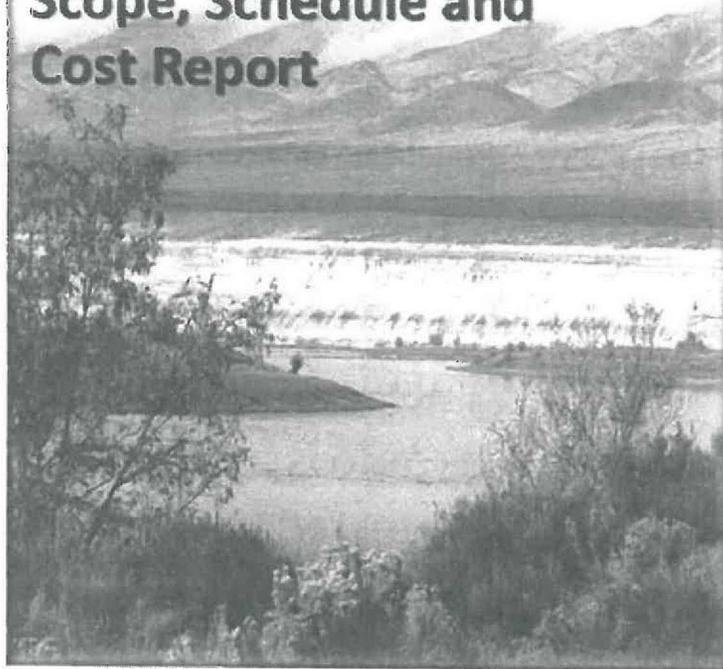
## Planned Activities

### October 2015 – March 2016

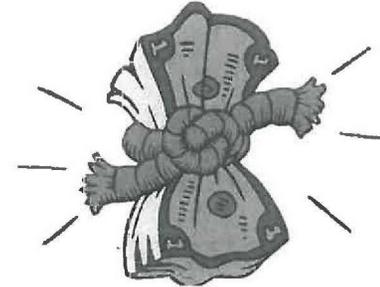
- Complete revisions of groundwater CERCLA SAPs and RCRA Monitoring Plans
- Complete 200-BP-5 treatability test and continue treatment of 200-BP-5 groundwater at the 200 West P&T Facility
- Complete construction of the truck unloading station at the 200 West P&T Facility
- Monitor the I-129 hydraulic containment operation
- Resume operation of three 200-DV-1 perched water wells
- Complete 300-FF-5 Stage A uranium sequestration
- Finalize the 200-SW-2, 200-DV-1, and 200-WA-1/200-BC-1 RI/FS work plans
- Finalize the 200-BP-5 remedial investigation (RI) report and 200-PO-1 RI addendum
- Finalize the 200-PW/1/3/6 & 200-CW-5 RD/RA work plan

**2015**

**Hanford Lifecycle  
Scope, Schedule and  
Cost Report**



**Hanford Lifecycle Scope, Schedule  
and Cost Report**



**TPA Milestone: M-036-01**

**Quarterly Performance Report**

December 17, 2015

Stephen Korenkiewicz, DOE-RL  
Lifecycle Report Project Manager



## MILESTONE DESCRIPTION AND DELIVERABLE

1. The U.S. Department of Energy (DOE) shall prepare and submit to the U.S. Environmental Protection Agency (EPA) and Washington State Department of Ecology (Ecology) a report setting out the lifecycle scope, schedule and cost for completion of the Hanford Site cleanup mission.
2. The initial Hanford Lifecycle Scope, Schedule and Cost Report (Lifecycle Report) was submitted to DOE on July 25, 2011, and subsequent reports are due January 31 of each year. The 2015 Lifecycle Report was the fifth Lifecycle Report to be prepared.



## RL PROGRAM MANAGERS' ASSESSMENT OF CONTRACTOR PERFORMANCE

1. The contractor responsible for the Lifecycle Report is Mission Support Alliance, Portfolio Management.
2. There were no performance issues related to development and preparation of the 2015 Lifecycle Report or the Draft 2016 Lifecycle Report.



## SIGNIFICANT ACCOMPLISHMENTS FOR THE LAST THREE MONTHS

1. DOE reviewed the Draft 2016 Lifecycle Report submitted on August 20, 2015 and provided comments in October 2015.
2. The RL planning case was updated and incorporated into a Draft Final report that was submitted to DOE for concurrence review on November 17, 2015.
3. The disagreement between Ecology and DOE about including an alternative analysis of cesium/strontium capsule storage options in the 2016 Lifecycle Report was resolved at a Senior Manager's meeting the week of September 21, 2015 – the report will not include an alternative analysis.



## SIGNIFICANT PLANNED ACTIONS FOR THE NEXT SIX MONTHS

1. Submit Final 2016 Lifecycle Report to DOE by December 31, 2015.
2. DOE submittal of Final 2016 Lifecycle Report to EPA and Ecology by January 31, 2016.
3. Release Fact Sheet and post the Final 2016 Lifecycle Report on [www.hanford.gov](http://www.hanford.gov) in mid-February 2016 for public review.
4. Develop the planning case for the 2017 Lifecycle Report and determine if it will include an alternatives analysis.
5. Review public feedback on the 2016 Lifecycle Report for inclusion in the 2017 Lifecycle Report.



## STATUS AND ISSUES

### BUDGET/COST STATUS

No major issues identified.

### ISSUES

No major issues identified.

### NON-TPA REGULATORY ISSUES/POTENTIAL IMPACTS TO TPA

No major issues identified.



RIVER CORRIDOR CLOSURE PROJECT

*DOE's Largest Environmental Cleanup Closure Project*

# TPA Quarterly Review

For Period: July - September 2015



*Tri-Party Agreement*

## *River Corridor Milestones:*

M-16

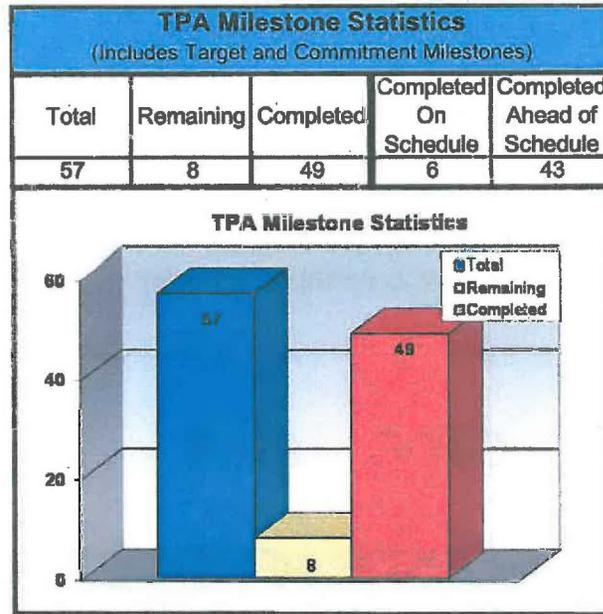
M-89

M-94

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

**December 17, 2015**

*Protecting the Columbia River*



### Quarterly Summary (July – September 2015)

- **Completed TPA Milestones:**
  - M-16-69 - Complete All Interim 300 Area Remedial Actions to Include Confirmatory Sampling of All Candidate Sites Listed in 300-FF-2 ROD (except for 618-10 and 618-11 Burial Grounds). (Due 9/30/15). Completed 9/17/15.
- **Approved Change Requests:**
  - None for this reporting period.

TPA MS No.	Compliance Date	Title	Status	Comments
<b>M-16 Milestones - Remedial Action (milestones through 12/31/2016)</b>				
M-16-69	09/30/15	Complete All Interim 300 Area Remedial Actions to Include Confirmatory Sampling of All Candidate Sites Listed in 300-FF-2 ROD (except for 618-10 and 618-11 Burial Grounds)	Complete	Milestone completed 9/17/15.
M-16-149	03/31/16	Complete 100-IU-2/6 Interim Response Actions for Following Sites: 600-293, 600-294, 600-298, 600-299, 600-300, 600-301, 600-303, 600-305, 600-309, 600-310, 600-313, 600-316, 600-318, 600-319, 600-320, 600-321, 600-328, 600-329, 600-331, 600-332, 600-334, 600-326, 600-349, 600-358, 600-368, 600-369, 600-370, 600-371, 600-372, 600-373, 600-374, 600-375, 600-376, 600-377, 600-378, 600-379	At Risk	The changed scope of 600-349 may cause delays to milestone completion. Change package M-16-15-08 proposes moving the waste site to a later milestone. This change package was disapproved by EPA on 12/14/15.
M-16-161	03/31/16	Complete Area Interim Response Actions for 18 100-D Area Sites, 10 100-H Area Sites, and 600-385, including revegetation of 100-D and 100-H Waste Sites.	At Risk	Cultural review for the 600-385 waste site may affect ability to complete the milestone by 3/31/16. Ecology approved the M-16-15-09 change package on 12/15/15, which moves the waste site into the M-16-00A milestone due 3/31/17.

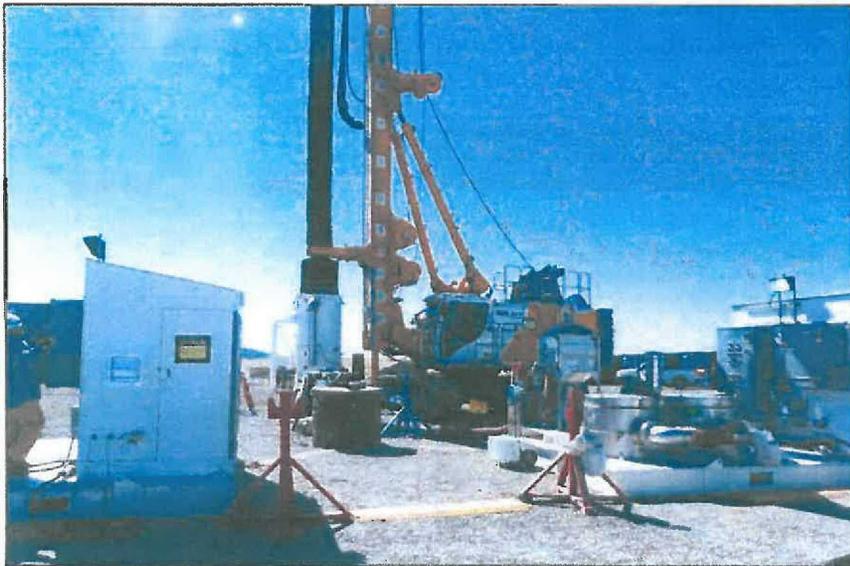
**M-89 Milestone - 324 Bldg. Non-Permitted MW Units Closure (milestones through 12/31/2016)**

M-89-06	06/30/16	Submit to Ecology in Accordance with Procedures in WAC 173-303-830(4)(b), a Request for a Class 2 Modification to Hanford Dangerous Waste Permit, to Include in Permit the "324 Bldg. Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault, and Associated Area Closure Plan" (Closure Plan), DOE/RL-96-73 revised as necessary to address releases to soil and to ensure compliance with requirements of WAC-173-303-810. DOE's revised closure plan will include a schedule for completing closure activities.	On schedule	
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**Significant Accomplishments – For Last 3 Months:**

**M-16 – Remedial Action / Risk Assessment**

- Initiated augering of 618-10 vertical piping units (VPUs).
- Completed backfill of 100-N-96, 600-358 and available sites at 100-D/H Areas.
- Completed excavation of 600-326:1 and 600-326:2.
- Completed backfill and revegetation of 300 Area.
- Received approval of 25 waste site closure documents.



618-10 VPU Auger Assembly and Equipment Skid



Aerial View of 300 Area September 2015

**M-89 – 324 Bldg. Non-Permitted MW Units Closure**

- Completed 100% design for remediation of 300-296 waste site under 324 B-Ceil.
- Completed mockup facility crane load-test.
- Completed demolition of 300-296 Proof of Principle site.

**Significant Accomplishments – For Last 3 Months (cont'd):**

**ERDF**

- For period July-September, disposed ~ 131,300 tons of waste; bringing total to ~ 17.5 million tons disposed in ERDF.
- Provided the Closure Operations Project with transportation, treatment, and disposal support.
- Received shipments of roll-on/roll-off containers, drums, and special-handled waste from other Hanford Contractors (OHCs).



Macroencapsulation of OHC Pump at ERDF

**Significant Actions Planned – For Next 3 Months:**

**M-16 – Remedial Action / Risk Assessment**

- Complete FY 2016 revegetation campaign.

**M-89 – 324 Bldg. Non-Permitted Mixed Waste Units Closure**

- Initiate 324 Building Zone 1 HEPA filter replacement.

**ERDF**

- Operate 2 ramps (100-160 cans/day).
- Receive and offload long-length items from Tank Farms as weather permits.

**PERFORMANCE SUMMARY**  
 Contract Inception (8/27/05) through September 2015  
 (\$K)

	IPB		CUMULATIVE			Previous Quarter Comparison			
	BAC	EAC	BCWS	BCWP	ACWP	SCHEDULE VAR (\$)		COST VAR (\$)	
						Jun	Sep	Jun	Sep
D4	651,619	631,667	648,192	637,308	569,597	-10,922	-10,884	66,898	67,711
Reactor ISS	75,902	81,777	75,902	75,902	81,777	0	0	-5,875	-5,875
Field Remediation	999,515	937,544	967,337	873,375	811,143	-89,222	-93,962	63,054	62,232
Waste Operations	625,821	506,933	602,486	612,953	491,418	12,724	10,467	123,407	121,535
ESFC	80,791	61,140	78,952	76,573	58,929	-2,418	-2,379	17,688	17,644
Mission/General Support	437,117	409,513	408,472	408,472	375,948	0	0	36,437	32,524
Transition	3,979	3,747	3,979	3,979	3,747	0	0	232	232
Contingency						0	0	0	0
<b>TARGET COST TOTAL</b>	<b>2,874,744</b>	<b>2,632,321</b>	<b>2,785,320</b>	<b>2,688,561</b>	<b>2,392,559</b>	<b>-89,839</b>	<b>-96,759</b>	<b>301,841</b>	<b>296,002</b>

**Schedule Variance (PMB): (\$96,759K)**

- Variance associated with 618-10 and 100-H remediation delays. 618-11 negative schedule variance is due to funding constraints.
- Delay in D4 due to waste site discovered beneath 324 Building. Min-safe activities will continue until in-cell waste site remediation is complete.

**Cost Variance (PMB): \$296,002K**

- Significant underruns experienced in 300 Area building characterization, deactivation, and demolition activities; and in utility charges and surveillance and maintenance activities. Positive cost variance decreasing due to impacts from beryllium program changes and differing site conditions at 309 and 340 Buildings, as well as project support costs.
- 100-B/C, 100-D, 100-F, and 100 IU-2/6 remediation underruns due to favorable subcontract rates largely offset by overruns at 300 Area due to delayed release of facilities, and 618-10 due to quantity growth and change to hazard category 3.
- Costs have been less than planned due to Waste Operations efficiencies achieved in waste treatment, transportation, disposal, and construction; and Mission/General Support efficiencies in Project Services, Project Integration, and Office of General Manager.

## ***RCC Issues***

### **600-349 Waste Site Cultural Resource Review**

- **Issue:** Unexploded ordnance removal has been completed at the waste site, however, additional sampling to confirm protectiveness requires that a National Historic Preservation Act (NHPA) Section 106 review be completed. The process will extend beyond the TPA milestone date.

**Status:** Sampling has been agreed to with EPA and the NHPA Section 106 review is in-process. Change package M-16-15-08 proposes moving the waste site to a later milestone. This change package was disapproved by EPA on 12/14/15.

### **600-385 Waste Site Cultural Resource Review**

- **Issue:** Delays in obtaining cultural resources release have placed completion of M-016-161, due March 31, 2016, at risk.

**Status:** DOE continues to await tribal response on Memorandum of Agreement (MOA). Ecology approved the M-16-15-09 change package on 12/15/15, which moves the waste site into the M-16-00A milestone due 3/31/17.



**Solid Waste Stabilization  
and Disposition Project  
RL-0013**

**Milestone Review  
M-091/M-026**

December 17, 2015



***E  
M*** ***Environmental Management***

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

## Accomplishments

- M-091-03 – Project Management Plan (PMP) – Complete 12/08/15 (16-AMRP-0030)
- M-026-01 – Land Disposal Restrictions (LDR) Report
  - CY 2014 Report submitted 04/21/15 (15-AMRP-0120) – Working on path forward to address to Ecology comments
  - CY 2015 Report – Kickoff meeting for preparing the report held 12/02/15
- Tentative Agreement: M-091-47 – Treat Transuranic Mixed (TRUM) Waste/Mixed Low-Level Waste (MLLW)
  - M-091-47A – Complete 09/10/15 (15-AMRP-0361)
  - M-091-47B –
    - 179 m<sup>3</sup> of 280 m<sup>3</sup> complete as of 12/01/15
    - Last container to meet the 09/30/16 milestone to be shipped the week of 12/14/15
    - Expected completion – 02/16



**EM** Environmental Management

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## Accomplishments

- Tentative Agreement: M-091-<sup>51</sup>~~47~~ – Engineering Study/Alternatives Evaluation – Kickoff meeting held



**E  
M** Environmental Management

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## Milestone Status

- Tentative Agreement (TA) to revise M-091 Milestone Series approved by DOE (06/30/15) and Ecology (07/01/15)
  - Public Comment Period – 07/06/15-09/25/15
  - Existing milestones would be deleted:
    - M-091-01 (Establish Additional Treatment Capabilities)
    - M-091-42/43 (MLLW Treatment)
    - M-091-46 (Certify TRUM Waste)
  - New milestones would be added:
    - M-091-47 (TRUM Waste/MLLW Treatment)
    - M-091-44T (Establish Additional Milestones for TRUM Waste Shipment)
    - M-091-48 (Complete TRUM Waste Shipment)
    - M-091-49 (TRUM Waste Retrieval)
    - M-091-51/52/53 (Alternative Analysis for Additional Capabilities/Establish Milestones for Gaining these Additional Capabilities)



## Project Baseline Performance

Contract to Date through November 2015

Dollars in Thousands

Title	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance	Cost Variance
Central Waste Complex	69,155.9	68,912.5	65,977.3	-0.4%	4.3%
Waste Receiving and Packaging Facility (WRAP)	40,652.3	40,652.3	39,805.3	0.0%	2.1%
T Plant	81,267.1	80,761.4	64,113.7	-0.6%	20.6%
MLLW Treatment	43,182.5	43,182.5	37,200.2	0.0%	13.9%
TRU Waste Retrieval	99,991.6	99,991.6	112,263.1	0.0%	-12.3%
TRU Waste Repackaging	68,189.9	72,760.2	66,184.4	6.7%	10.4%
TRU Waste Disposition	30,934.4	30,934.4	22,345.0	0.0%	27.8%
Project Management	117,662.6	117,218.1	101,664.9	-0.4%	13.3%



**EM Environmental Management**

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## **Actions Planned for Next Six Months**

- Address public comments on the proposed revision to the M-091 Milestone series.
- Complete (TA) M-091-47B Milestone of 280 m<sup>3</sup> of 09/30/16
- Prepare Engineering Study/Alternatives Analysis towards the (TA) M-091-51 Milestone of 09/30/16



TPA Decision Document List

	Geographical Areas	ROD Area Location	Document	Milestone	Milestone Due Date	Regulatory Review	DOE Lead	Contractor Lead	Regulatory Lead	Agency	Comments/Issues
1	Central Plateau Source Inner Area	200-IS-1 200 East Inner Area/Pipelines	RI/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 Dispute Resolution	2/24/2014	TBD	D. Hildebrand	B. Day	N. Menard	Ecology	Dispute Resolution extended to January 28, 2016.  RI and Ecology are continuing the Work Plan preparation workshops as part of the RI/FS WP development
2	Central Plateau Source Inner Area	200-EA-1 200 East Inner Area/Pipelines	RFI/CMS & RI/FS Work Plan	M-015-02A: Submit a RCRA Facility Investigation/Corrective Measures Study & Remedial Investigation/Feasibility Study work plan for the 200-EA-1 operable unit to Ecology To Be Missed	6/30/2015	TBD	D. Hildebrand	B. Day	N. Menard	Ecology	Project not funded in FY14 and FY15; Tentative Agreement extends due date to 9/30/2017.
3	Central Plateau Source Inner Area	200-EA-1 200 East Inner Area/Pipelines	TSD - Closure Plans for 207-A South Retention Basin (DOE/RI-2005-08 RO), 216-A-29 Ditch (DOE/RI-2008-03 RI), 216-A-309 Crb (DOE/RI-2005-00 RO), 216-A-37-1 Crb (DOE/RI-2005-08 RO), and 216-B-61 Trench (DOE/RI-2006-11 RI)	M-027-02: Submit Revised Closure Plan to support TSD closure for five (5) TSD Units Complete	MS Completed 6/23/14	6/24/2014 12/9/2014	J. Astel	P. Boynes	N. Menard	Ecology	Formal Ecology comments have not been received. Ecology provided informal comments on 207-A Closure Plan, which was submitted to Ecology on June 22, 2015. Remaining closure plans have RCRA/CERCLA integration issues.
4	Central Plateau Source Inner Area	200-EA-1 and 200-IS-1 200 East Inner Area/Pipelines	CMS & FS Report(s) & PCAD(s)/PP(s)	M-015-02B: Submit Corrective Measures Study & Feasibility Study Report(s) and Proposed Corrective Action Decision(s)/Proposed Plan(s) for the 200-EA-1 and 200-IS-1 OUs to Ecology At Risk	12/31/2016	TBD	D. Hildebrand	B. Day	N. Menard	Ecology	Milestones will be missed. 200-EA-1 Work Plan is in progress with the delivery date still under negotiation and the 200-IS-1 Work Plan is not funded in FY14 and FY15 Tentative Agreement extends due date to 11/30/2022
5	Central Plateau Source Inner Area	200-IS-1	TSD - Closure Plan for the Heavens Storage and Treatment Facility TSD Unit	M-027-01: Submit Revised Closure Plan to support TSD closure of the Heavens Storage and Treatment Facility (776-S-141/142) TSD Unit. Complete	MS Completed 7/16/2010		D. Hildebrand	P. Boynes	N. Menard	Ecology	Comments received. Project funded in 2017 to address comments.
6	Central Plateau Source Inner Area	200-WA-1 and 200-BC-1 200 West Inner Area	RI/FS Work Plan	M-015-05A: Submit a Remedial Investigation/Feasibility Study Work Plan for the 200-WA-1 operable unit to EPA Complete	MS Completed 12/27/2011	10/1/2015 11/16/2015	J. Seale	M. Byrnes	C. Cameron	EPA	Draft B WA-1 RI/FS Work Plan was submitted to EPA on September 17, 2015. Received EPA comments in November. Responses are being prepared.
7	Central Plateau Source Inner Area	200-WA-1 and 200-BC-1 200 West Inner Area	FS/PP	M-015-05B: Submit Feasibility Study report and Proposed Plan for the 200-BC-1/200-WA-1 operable unit to EPA To Be Missed	12/31/2015	TBD	J. Seale	M. Byrnes	C. Cameron	EPA	Milestones will be missed due to funding and delays in the completion of the 200-WA-1 RI/FS Work Plan. Tentative Agreement extends due date to 7/31/2021.
8	Central Plateau Source Inner Area	200-SW-2 200 West Inner Area & 200 East Inner Area	RFI/CMS & RI/FS Work Plan - Draft B	M-015-113: Submit Draft B RCRA Facility Investigation/Corrective Measures Study (RFI/CMS) & Remedial Investigation/Feasibility Study (RI/FS) work plan for the 200-SW-2 OU to Ecology Complete	MS Completed 9/15/2015	4/1/2015 5/26/2015	D. Hildebrand	B. Day	D. Singleton	Ecology	RI requested, and was granted, a 90 day extension (22 October 15) due to the integration with the Principles and Parameters negotiations. A second extension was requested on October 18, 2015; Ecology agreed to extend comment resolution to the end of March 2016.
9	Central Plateau Source Inner Area	200-SW-2 200 West Inner Area & 200 East Inner Area	RFI/CMS & RI/FS & PCAD/PP	M-015-09B: 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 At Risk	12/31/2016	TBD	D. Hildebrand	B. Day	D. Singleton	Ecology	Milestones will be missed due to delays in completion of the 200-SW-2 RI/FS Work Plan. Tentative Agreement extends due date to 1/31/2023.

Note: Blue text reflects changes from previous quarter.

Information current as of 12/18/15

TPA Decision Document List

	Geographical Areas	ROD Area Location	Document	Milestone	Milestone Due Date	Regulatory Review	DOE Lead	Contractor Lead	Regulatory Lead	Agency	Comments/issues
10	Central Plateau Source Inner Area	200-FW-1/3/6, CW-5 200 West and 200 East	RD/RAWP	M-016-125: Submit a Remedial Design/Remedial Action Work Plan for 200 CW-5 and 200-FW-1/3/6 to EPA as described in section 12.4 of the associated ROD. Complete	MS Completed 9/30/2015	10/1/2015 11/16/2015	B. Long	P. Boynes	E. Leffe	EPA	Document was submitted to EPA on September 30, 2015. EPA comments were received in November. RL will be meeting with EPA regarding extension time frame.
11	Central Plateau Source Deep Vadose Zone	200-DV-1 Deep Vadose Zone	R/FS Work Plan	M-015-120A: Submit RCRA Facility Investigation/Corrective Measures Study (R/FS) & Remedial Investigation/Facility Study (R/FS) work plan for the 200-DV-1 OU to Ecology. The work plan shall include technology screening that identifies technologies applicable for characterization, treatment, and monitoring of deep vadose zone contaminants. Complete	MS Completed 5/16/2015	4/1/2015 6/24/2015	J. Morse	M. Byrnes	D. Gowan	Ecology	November 16, 2015 letter from RL to Ecology (16-AMRP-0027) requested the date for issuing the final R/FS WP be extended to January 15, 2016.
12	Central Plateau Source Deep Vadose Zone	200-DV-1 Deep Vadose Zone	CMS/FS and PP/PCAD	M-015-119B: Submit Corrective Measures Study & Feasibility Study Report and Proposed Plan/Proposed Corrective Action Decision for the 200-DV-1 OU to Ecology To Be Missed	9/30/2015	TBD	J. Morse	M. Byrnes	D. Gowan	Ecology	Milestone will be missed. This milestone cannot be completed until the R/FS & R/FS/CMS work plan is approved and the field characterization completed. Tentative Agreement extends due date to 8/30/2016.
13	Central Plateau Source Outer Area	200-CW-1, 200-CW-3, and 200-CA-1 Outer Area	Central Plateau Outer Area R/FS work plan/SAP	None		TBD	B. Vannah	B. Day	L. Buelow	EPA	Outer Area R/FS work plan/SAP is not funded in FY15. This work exceeds the R/FS report (M-015-388)
14	Central Plateau Source Outer Area	Outer Area	FS/PP	M-015-388: Submit a revised Feasibility Study Report and revised Proposed Plan(s) for the 200-CW-1, 200-CW-3, and 200-CA-1 Operable Units for Waste Sites in the Outer Area of the Central Plateau to EPA On Schedule	TBD	11/1/2015 12/15/2015	B. Vannah	B. Day	L. Buelow	EPA	Tentative Agreement extends due date to 7/31/2016.
15	Central Plateau Source Outer Area	200-CW-1, 200-CW-3, and 200-CA-1 Outer Area	TSDs - Closure Plan for 216-8-3 Malt Pond and 216-5-3D Pond and Ditch	M-017-03: Submit Revised Closure Plans Complete	Milestone Completed 4/18/2015	4/19/2015 7/17/2015	J. Smith	P. Boynes	N. Menard	Ecology	NOD was issued and response submitted. Major issues have been identified related to non-TSD best-practice contamination and these issues remain unresolved.
16	Central Plateau Groundwater	200-BP-5, 200-PO-1 200 East Area Groundwater	200-BP-5 RI Report	None		8/11/2015 9/25/2015	J. Morse	C. Wittreich	N. Menard	Ecology	RL Transmitted the Draft A 200-BP-5 RI report to the regulators for review on August 11, 2015. Ecology suspended their review on October 23, 2015.
17	Central Plateau Groundwater	200-BP-5, 200-PO-1 200 East Area Groundwater	200-PO-1 RI Report Addendum	None		8/11/2015 9/25/2015	J. Morse	C. Wittreich	N. Menard	Ecology	RL Transmitted the Draft A 200-PO-1 RI report addendum to the regulators for review on August 11, 2015. Ecology suspended their review on October 23, 2015.
18	Central Plateau Groundwater	200-BP-5, 200-PO-1 200 East Area Groundwater	200-BP-5/200-PO-1 FS/PP	M-015-21A: Submit a 200-BP-5 and 200-PO-1 OU Feasibility Study Report and Proposed Plan(s) to Ecology To Be Missed	6/30/2015	TBD	J. Morse	C. Wittreich	N. Menard	Ecology	FS/PP was not funded in FY14. Work initiated in FY15 with an expected Draft A delivery to Ecology by 9/30/16. Tentative Agreement extends due date to 6/30/2018.
19	Central Plateau Groundwater	200-BP-5 200 East Area Groundwater	200-BP-5 EE/CA	None		6/11/2015 9/3/2015	J. Morse	C. Wittreich	N. Menard	Ecology	RL Transmitted the Draft A EE/CA report addendum to the regulators for review on June 11, 2015. Preliminary response provided to Ecology's comment on October 1, 2015.
20	Central Plateau Groundwater	200-UP-1 200 West Area Groundwater	Technology Evaluation Plan	M-016-132: Submit 1-32B Technology Evaluation Plan Draft A to EPA as defined in the 200-UP-1 ROD/RAWP Complete	Milestone Completed 12/3/2015	6/18/2016 8/2/2016	K. Amrhein	PHHC	E. Leffe	EPA	RL transmitted Draft A to EPA for review on December 3, 2015.
21	River Corridor	100-8C-1, 100-8C-2, 100-8C-3 100-8/C	R/FS Reports and Proposed Plan	M-015-79: Submit R/FS Report and PP for 100-8C On Schedule	12/15/2016	12/16/2016 01/30/2017	G. Simon	M. Evans	L. Buelow	EPA	R/FS being revised in FY16 to incorporate additional data
22	River Corridor	100-DR-1, 100-DR-2, 100-HR-1, 100-HR-2, 100-HR-3 100-B/H	R/FS Reports and Proposed Plan	M-015-76-701: Submit FS & PP for HR 1/2/3 and DR 1/2 Complete	Target Completed 12/14/2015		J. Hanson	M. Drewett	N. Menard	Ecology	Resolving EPA legal comments.
23	River Corridor	100-KR-1, 100-KR-2, 100-KR-4 100-K	R/FS Reports and Proposed Plan	M-015-68-701: Submit R/FS Report and PP for 100-K. Complete	Target Completed 9/21/2015		J. Hanson	M. Drewett	C. Garetzi	EPA	The characterization borings at 100-KR Reactor waste sites completed in September 2015. Field investigation report, including PHHC leach testing results, to be submitted in May 2016. R/FS rewrite scheduled to begin in FY2017.
24	River Corridor	100-NR-1, 100-NR-2 100-N	R/FS Reports and Proposed Plan	M-015-75: Submit FS/PP for NR 1/2 Complete	Milestone Completed 6/14/2015	8/25/2015 10/2/2015	G. Simon	B. Feucht	A. Boyd	Ecology	Ecology is not reviewing the PP until R/FS comment resolution is complete. Disposition meetings with ECI are ongoing. Based on discussion, Ecology is preparing to grant an extension to the comment resolution to the end of March 2016.
25	River Corridor	100-NR-1, 100-NR-2 100-N	Remedial Design / Remedial Action Work Plans	None		10/22/2015 12/8/2015	G. Simon	P. Pangle	A. Boyd	Ecology	RL transmitted the Revision 2, Draft A 100-NR-2 ROD/RAWP and SAP to the regulators for review on October 22, 2015. Waiting on comments.

(Information current as of 12/10/15)

Note: EBA text reflects changes from previous quarter.

