

**River Corridor/Central Plateau
Tri-Party Agreement Milestone Review
Meeting Minutes
January 16, 2014**

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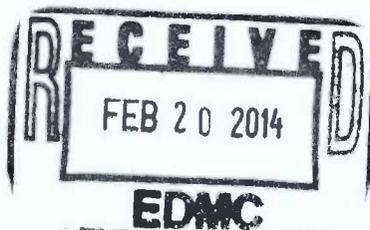
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River Corridor Closure Project - Milestones M-16/M-89/M-92/M-94

Quarterly Summary (October - December 2013) - DOE-RL noted that there were no milestones scheduled for completion during the quarter. DOE-RL stated that it is on track for completion of the 17 remaining milestones.

Milestone Status:

M-89 - DOE-RL reported that it has approved the subcontract to do the remediation of the waste site under the 324 building. DOE-RL noted that the contractor WCH is on track to meet the milestone for the 30 percent conceptual design by late summer 2014. Ecology asked if the remediation contractor will also be doing the design. DOE-RL responded that the subcontractor is set up to do the design and remediation, and the approval is set up in two phases. The design and mockup will be done under the first phase, and then the remediation will be approved under the second phase.

M-92-16 - DOE-RL reported that removal of the special case waste is scheduled for completion this spring. DOE-RL noted that jacking up of the 340 vault is starting today, and the vault is scheduled to be moved to ERDF sometime in February 2014, which will complete the milestone.

Significant Accomplishments - For Last 3 Months:

M-16 - Remedial Action/Risk Assessment - DOE-RL reported that the push-probe sampling results at UPR-100-N-42 revealed no petroleum contamination, and the site will be closed out. DOE-RL expressed appreciation to EPA and Ecology for their support on the waste site closure documents. DOE-RL noted that about 90 waste site closures are planned in FY14, and the remaining 40 or so will be done in FY15. DOE-RL stated that the K Area shoreline sampling has been completed, which was a collaborative effort with all the agencies and the tribes. DOE-RL added that the sampling results are positive and there should not be any remediation required in the culturally sensitive areas.

ERDF - DOE-RL reported efforts are under way to dispose of all the waste that has been sent to ERDF. There was a slow-down during the freezing weather, but the warmer weather allowed the disposal efforts to get caught up.

Significant Actions Planned - For Next Three Months:

M-94 - 300 Area Surplus Facilities Disposition - DOE-RL stated that efforts to remove the 340 vault are being initiated today. The 340 vault will be jacked up about 11 feet, and then a pad will be poured underneath to allow the multi-transport trailer to be brought in, lift the vault and take it out. DOE-RL added that since the 340 vault is mixed waste, a pan will be placed underneath for containment, which is part of the shipping process requirements. DOE-RL stated that efforts to jack up the 309 Plutonium Recycle Test Reactor (PRTR) were started last week, and the PRTR was lifted four inches to ensure the center of gravity and that it wasn't hung up anywhere. The lift of 309 is planned this Friday and Saturday, and will consist of two 1,100 ton lifts. DOE-RL noted that media is planned and available next Tuesday (1/21/14) to report on the 309 removal efforts. DOE-RL stated that the 3790 building, which was the old badging house, is planned for removal by early summer 2014.

Performance Summary - DOE-RL reported that the project performance continues to do well. DOE-RL noted that the 2014 budget will help to accelerate some of the work, mainly in the 300 Area and also with the 618-10 technology development.

Issues - DOE-RL stated that a rough calculation showed approximately 26 tons of chromium contamination have been removed from the 100-D-100 waste site, and the excavation is down to groundwater. DOE-RL stated that water samples taken from the bottom were about 4500 ppm. DOE-RL noted that the green color in the water has settled out and is no longer there. DOE-RL added that there are low levels of chromium contamination in the sidewall, and efforts continue to resolve the path forward with Ecology. DOE-RL stated that agreement was reached with the agencies to lower the water level by cutting off some of the injection wells. The intent is to do more sampling in the bottom of the excavation, which has already been characterized, to help determine the path forward and accelerate the cleanup of the plume. DOE-RL stated that PNNL will provide support by doing some additional analysis of the soil structure and geology underneath the waste site. DOE-RL noted that WCH is not planning to backfill 100-D-100 until this summer, which allows some time to determine the path forward.

DOE-RL stated that 100-N-85 is one of the deeper petroleum sites. Two actions under consideration are doing in-situ bioremediation or leaving the site as is with no further action, based on additional characterization. A borehole will be installed and samples will be taken. The borehole will be developed into a well, if necessary, to hook up to the bioremediation system, and also be used for sampling associated with the N Area RI/FS. Ecology noted that the interim Record of Decision (ROD) designates the site for remove, treat, dispose (RTD), the final

ROD calls for bioremediation, and now there is the third potential determination that it would fall under no action. EPA asked when the borehole will be installed. DOE-RL indicated that direction has to be given to WCH, and it could be installed sometime this spring.

DOE-RL noted another issue that has come up in the 300 Area, since the final ROD is in place, with the discovery of waste sites or potential waste sites. DOE-RL stated that graphite blocks with serial numbers on them and other debris were discovered in the 6 barrow pit, and the question is how to add the waste site into the ROD. DOE-RL noted that it is fairly benign, non-rad material. EPA suggested cleaning it up under the 100-IU-2&6 ROD.

Ecology inquired about the incident at trench 618-10/11. DOE-RL stated that while a debris drum was being sheared in the 618-10 trench yesterday, a puff was observed. The video was reviewed, which shows a white powder pouring out of the drum when it was cut open. The powder did not catch on fire, but what looked like a vapor fire quickly moved across the face of the drum and the drum was buried with soil within seconds. DOE-RL stated that there was no contamination detected on the boundaries of the trench, although there was a higher airborne reading on the excavator bucket. DOE-RL noted that a second excavator operator was present and buried the drum with soil, executing the plan for handling the situation.

Hanford 100-K Remediation - M-016 and M-093 TPA Milestones

Accomplishments - 4th Quarter 2013 and 1st Quarter 2014:

Sludge Treatment Project Phase 1 - Removal of Containerized Sludge - DOE-RL noted that the reporting today is for the last six months, since the quarterly meeting in October 2013 was canceled. DOE-RL stated that the final design for the sludge retrieval and transfer system was completed, meeting interim milestone M-016-174 by September 30, 2013. A letter was sent approximately September 17, 2013, notifying EPA that the milestone had been completed. DOE-RL noted that due to the size of the design package (over 7,000 pgs), EPA requested a summary of the design package for review. EPA acknowledged receipt of the summary and indicated that the milestone has been met.

DOE-RL noted that last spring and summer construction on the annex was suspended due to the sequester. The construction team was remobilized to resume construction at the start of FY14 in October. The annex is a combination of concrete at the bottom and steel on top, and the concrete placements necessary to support steel construction have been completed. The next phase of the project will be construction of the structural steel.

DOE-RL reported that efforts continue to develop and refine the process design for the sludge removal system. The Integrated Process Optimization

Demonstration (IPOD) has been established at the 400 Area MASF test facility. The IPOD is a full-scale prototype of the Engineered Container Retrieval and Transfer System (ECRTS) for sludge removal. The IPOD is run through all the different operation modes and sequences, which helps to identify issues and fine-tune the process and to minimize problems typically encountered with startup of a system. The IPOD also allows the operations staff to observe and provide feedback. DOE-RL noted that the same prototype model was used a couple years ago for processing the knock-out pot (KOP) material, and when the system was installed in the basin, it worked as designed with no unexpected conditions.

DOE-RL reported that the Engineered Container Retrieval and Transfer System (ECRTS) critical decision 2/3 (CD-2/3) package was received from the contractor in August 2013, which includes the final design and a request from the contractor to approve CD-3. DOE-RL noted that the next major milestone in the project management system is approval of CD-2/3, which allows procurement and construction of the ECRTS process system to move forward. DOE-RL added that the Preliminary Design Safety Analysis (PDSA) was also submitted by the contractor, and it is an important companion document to the CD-2/3. Approval of the PDSA is DOE-RL's process to authorize the contractor that the operation or system is safe.

DOE-RL noted that design has been initiated to modify cells at T Plant to support sludge receipt and handling at T Plant. DOE-RL stated that a water addition system will be installed. Eventually when the sludge is received at T Plant, the water level will be monitored to ensure it stays at a certain level, and if necessary, water will be added to maintain the level in the sludge transportation and storage containers (STSCs). DOE-RL stated that some of the cells in T Plant need to be outfitted with a supporting frame for holding the STSCs and for leak detection inside the cells. DOE-RL added that a work package is being prepared to remove the old NLOP sludge equipment that is sitting on a cell in T Plant.

Ecology asked about the time frame for storing the STSCs in T Plant. DOE-RL responded that the time frame is indeterminate at this time. Ecology asked EPA if an indeterminate time frame for sludge storage at T Plant would mean that the ROD would be open indefinitely. EPA responded that the ROD would need an Explanation of Significant Difference (ESD) or a ROD amendment since the ROD is currently written for lag storage, which is short-term storage. EPA noted that getting all the permit modifications in place will be its main focus.

EPA noted that the milestone for initiating sludge retrieval is at risk, and requested a defined recovery schedule to be able to determine how much time can be made up. DOE-RL responded that for FY14 the budget has been approved and the project schedule is currently being reviewed to determine whether to move the schedule to the left or keep it as it is. EPA responded that it does not know the status of the current schedule. DOE-RL noted that the schedule is

dependent on budget and funding, and it can only be assumed year to year what funding will be received. DOE-RL added that it will work on EPA's request for a recovery schedule.

Milestone Status - DOE-RL stated that the milestone status is the same as the last quarterly meeting in July 2013, which shows all the milestones at risk except for the Interim Safe Storage (ISS) milestones. DOE-RL noted that M-016-175, which is due later this year, is at risk and will need to be addressed. EPA questioned the logic regarding milestone M-093-27 being on schedule, but M-016-00C is at risk. EPA stated that 00C was predicated on DOE-RL being able to meet 93-27. DOE-RL stated that 00C requires completion of the ISS milestones. EPA agreed, adding that the milestones were staggered to provide time for getting the final waste site cleaned up once the K West reactor went into ISS.

Planned Activities Next Six Months:

Engineered Container Retrieval and Transfer System (ECRTS) - DOE-RL noted that the work on technical initiatives to optimize the ECRTS design to improve safety includes exploring ways to reduce the material at risk (MAR) for the nuclear safety analysis. The reduction of MAR would potentially allow DOE-RL to downgrade some nuclear safety classified systems, saving on cost for procurement, operations, and maintenance of equipment. EPA stated that the boreholes planned for K East need to be elevated in priority, noting that the RI/FS cannot be completed until the data is obtained from the boreholes, and that the KE Reactor ISS is also linked to the boreholes. DOE-RL acknowledged EPA's comments, and stated that installation of the boreholes is a matter of funding and priority.

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

DOE-RL stated that the annual Lifecycle report will be submitted by the due date of January 31, 2014. DOE-RL noted that comments from prior reports were incorporated into the 2014 Lifecycle report that were considered applicable to aiding readability and decreasing volume. Ecology stated that there was a discussion with the supporting contractor MSA about changing the submittal date for the Lifecycle report from January 31 to April or May each year. Ecology indicated that no workshops would be needed to further discuss changing the date, and stated that DOE-RL could submit a change package to change the submittal date. DOE-RL stated that the potential impacts to changing the date are still being analyzed. DOE-RL noted that all current publicly available information is to be included in the Lifecycle report, and the last two weeks in March are when the President's budget request for the next fiscal year is released, which would pose a challenge to submitting the Lifecycle report in April. EPA suggested that the change package could state that information would be incorporated up to a certain cut-off point. Ecology added that even if the President's latest budget is not incorporated into the Lifecycle report, the public would have that information

available to help review the Lifecycle report.

Conduct Biennial Assessments of Information - TPA Milestone M-35

DOE-RL reported that a meeting was held with Ecology and EPA to discuss data access, and the system is working. During the meeting, some efficiencies were noted, and DOE-RL took three actions: 1) set up a network share to facilitate file swapping on HLAN among the organizations and reducing permission access restrictions; 2) install thin clients to make access easier and more efficient, and install a new printer; 3) streamline the access mechanism to make it more efficient. DOE-RL stated that it is targeting the end of February 2014 to make the process improvements.

PFP Closure Project - TPA Milestone M-083

Quarterly Milestone Summary (October - December 2013) - DOE-RL noted that the demo ready milestone (M-083-44) is still in jeopardy, but the M-083-00A milestone is still being statused as on schedule for 9/30/16. DOE-RL stated that PFP submitted its FY14 baseline update in September 2013, forecasting the demo ready milestone for April 2016, and the current schedule forecast is June 2016. PFP's FY14 baseline for the slab-on-grade completion was September 2016, and the current forecast is October 2016. DOE-RL pointed out that the dates do not include any efficiencies that PFP may realize, and efforts are under way to recover the schedule.

Accomplishments - 1st Quarter - DOE-RL noted there were additional highlights to report since the October 2013 quarterly meeting was canceled. Nine gloveboxes were completed during the fourth quarter of FY13 for a total of 20 gloveboxes. DOE-RL reported that there were no significant safety issues during the last quarter of FY13 and the first quarter of FY14.

DOE-RL stated that the initiatives that were identified during the value engineering (VE) study last year are being implemented this year, including procurement of the PremAire breathing systems and targeting use of the systems by June 2014. Efforts continue to get off the 17-inch vacuum, which is an aging system, and 234-5Z has been completed. DOE-RL noted that another system associated with the 17-inch vacuum is the micon system, which is used to regulate water transfer to ETF and automatically shut down systems during ventilation issues or seismic events. The micon system is 20 years old and its software has aged, and it is another driver to get off the 17-inch vacuum. Mockup demonstrations are being conducted to add foam to gloveboxes. A polyurethane foam was used, but in the initiation of the hazard analysis it was determined that the polyurethane foam has exothermic reaction capability. The evaluation of the foam alternatives is being expanded, which has added about 55 days to the schedule to conduct a foaming campaign. The analysis of foam alternatives is anticipated to be complete by early March 2014, and DOE-RL will know whether

or not a particular foam can be selected by that time. DOE-RL noted that foaming would enable the gloveboxes to be cut up much more safely and efficiently.

DOE-RL stated that the PRF crane has been repaired and is operational, and the pencil tanks are being size-reduced again. DOE-RL noted that the team working the pencil tanks continues to be efficient, and pencil tank 127 has been completed and 38 "failed" has been cut up and sealed out. DOE-RL reported that the flow test of the ventilation system was completed in December 2013 in an effort to determine whether or not work could be done with less than the six fans that are currently being used. DOE-RL stated that based on all of the gloveboxes that have been removed and ports that have been blocked off, the potential to go down to two or three fans is being evaluated.

DOE-RL reported that the FY14 project management baseline (PMB) update has demolition being resequenced. Originally the plan was to remove all of the MAR from the buildings before any demolition startup. The decision was made that demolition can be started in 234-5Z while work is still under way in 236-Z and 242. DOE-RL stated that the resequencing has identified a couple of critical paths for PFP, and the first critical path consists of completing the D&D work on the back side rooms and the labs at PFP. Once that is complete, the team will transition to the 234-5Z basement to perform all the drain line removals and grout all the tunnels and cavities in the basements to ensure structural stability for demolition when the large equipment is moved in. When the basement grouting is completed, the final decontamination will be done in 234-5Z to get it ready for demo.

The second critical path involves removing contaminated duct and filter boxes, process transfer lines and process vacuum lines in the duct level of 234-5Z. When that work is complete, the team will focus on removing the materials that are prohibited during demolition. The team will then perform the final decontaminations throughout 234-5Z to get it ready for demo, and at that point both the paths can conjoin to kick off the start of demolition. EPA asked if any sampling will be done before the basements are grouted so that the parties will know what is being left in place. DOE-RL responded that sampling will be done and is being tracked as characterization is being done.

Project Baseline Performance - DOE-RL stated that most of the contract-to-date cost and schedule variances are within the reporting thresholds.

Issues/Challenges - DOE-RL noted that there are some significant nonregulatory issues which haven't changed. Relating to the first bullet for managing culture change from operations to closure, PFP had to do a safety pause yesterday as a result of several events over the past four months. DOE-RL noted that there were about 12 to 14 events associated with conduct of operations, and if they were looked at individually they would not raise too much concern. However, the events were seen as a package and the decision was made to do a safety pause. A review of the conduct of ops issues was done with all the different teams at PFP,

and the direct reports were briefed on the expectations for conduct of ops. Planned Activities Next 3 Months - DOE-RL noted that the mockup demonstration to develop glovebox foaming is geared toward how to do the cuts on a foamed glovebox.

M-091/M-026 TPA Quarterly Milestone Review

Milestone Status:

M-091-03 - DOE-RL stated that the annual Project Management Plan (PMP) addresses disposal of backlog waste built up through the 80's and 90's. The PMP should be finalized within the next two months, and efforts are under way to start preparing the PMP that is due June 30, 2014. Ecology noted that for the last couple years, the comments for the PMP were incorporated into the next annual PMP. Ecology stated that it has requested that the last PMP be updated and finalized before the next PMP is submitted in June 2014. Ecology added that there are about five or six comments remaining to resolve for the current PMP.

M-026-01 - Land Disposal Restrictions Report (LDR) - DOE-RL stated that the last LDR report is being closed out and work is under way on the next report that is due April 30, 2014. Ecology stated that the current LDR report has been finalized and is ready to sign.

M-091-40, -41, -42, -43 - DOE-RL stated that there have been no activities associated with these milestones, due to lack of funding. Ecology acknowledged the current status of retrieval, and asked if DOE-RL has a project schedule for starting up retrieval and getting workers trained. DOE-RL responded that there is not a detailed schedule. Training, readiness and procurement of resources need to be laid out. Ecology stated that in order to have the assurance that DOE-RL will be able to meet the next enforceable milestone, a detailed schedule needs to be presented during the project managers meeting (PMM). DOE-RL indicated that discussions have been held with Ecology regarding training and readiness activities.

M-091-44 - DOE-RL reported that in September 2013, approximately 54 cubic meters (two boxes) of TRU waste were sent to Permafix Northwest. The waste was repackaged and sent back, with the exception of some waste that assay out as mixed low-level waste and has to be treated to meet LDR requirements.

M-091-46 - DOE-RL reported that there has been no progress since the last quarterly milestone meeting held six months ago.

Project Baseline Performance - DOE-RL noted that the schedule variances are a reflection of minimum safe activity. The cost variances are a reflection of past activities before Recovery Act money was spent.

Central Plateau Remediation Project - M-016-00, M-085-00

Accomplishments - DOE-RL provided an overview of the various surveillances that were completed. DOE-RL stated that the site prep has been initiated for the

PUREX Tank 11 asbestos abatement, and the plan is to complete Tank 11 by the end of March 2014. Ecology inquired about DOE-RL's annual cost for the Waste Information Data Services (WIDS) site housekeeping. DOE-RL stated that the cost has been cut dramatically, and the only sites that are being addressed are sites that have potential contamination that could spread. Ecology stated that it will indicate what number it is interested in after today's meeting.

Milestone Status - DOE-RL noted that the two near-term milestones are on schedule.

Project Baseline Performance - DOE-RL stated that the project baseline is on track with the funding received.

Planned Activities Next 6 Months – DOE-RL noted that the planned activities fall under minimum safe activities. DOE-RL provided an update on the evaluation of options for WESF interim dry storage project. The contractor put out a request for information (RFI) on the project, and six contractors submitted information and a walk-down of WESF was conducted. The contractor drafted a feasibility study that was submitted to DOE-RL, which indicated that dry storage for the capsules is a feasible option. DOE-RL noted that a similar exercise was conducted about ten years ago regarding dry storage, and there were improvements with the recent feasibility study. DOE-RL stated that the RFI was put out after an unsolicited proposal was received indicating that dry storage could be done much cheaper than what the contractor had initially suggested in the draft CD-0. The feasibility study did not result in a lower cost, and the estimate is still between 80 and 130 million dollars. DOE-RL indicated that its preference is to put out a request for proposal (RFP) for the dry storage project, but in discussions with the contractor, the contractor does not want to move forward unless there is funding identified for the project. DOE-RL noted that it had gone through the exercise once before and got to the point the project had to be put on hold due to a lack of funding.

DOE-RL stated that the interim dry storage project is different from the milestone, which is for a decision on final disposition of the capsules. Ecology stated that the milestone is the final disposition decision, and asked if a project schedule is in place to meet the 2017 milestone. DOE-RL stated that the RFP would provide the detail for the decision. Ecology stated the concern about meeting the milestone if DOE-RL is not ready to put out the RFP. DOE-RL stated that there is not a final repository for the capsules at this time, since Yucca Mountain is no longer the repository. Ecology requested that DOE-RL provide a project schedule for getting to the decision at the next project managers meeting.

Soil and Groundwater Remediation Project Milestone Review - M-015-00, M-016-00, M-024-00, M-037-00

Accomplishments – 4th Quarter 2013 & 1st Quarter 2014 (July-Dec. 2013) -

DOE-RL reported that there have been some problems with fouling in the 200 West Pump and Treat Facility injection wells, which will be addressed. DOE-RL

stated that it has been working with the agencies to be able to discharge some of the water from rehabilitation back into the 200 West Pump and Treat. DOE-RL indicated that overall the 200 West Pump and Treat facility is working well.

200-DV-1 – B Area Perched Water Extraction System - DOE-RL stated that two new extraction wells will be installed this year into perched water, which will enhance the capability to remove the concentrated uranium. Ecology noted that the sampling plan has been approved for the two new wells, which are to be installed by the end of this month. Ecology stated that comments have been incorporated into the Engineering Evaluation and Cost Analysis (EE/CA), and that Rev. 0 is about ready to go out for public comment. DOE-RL stated that the EE/CA will allow the perched water to be taken over to the 200 West Pump and Treat Facility for treatment instead of sending it to ETF for treatment. DOE-RL noted that although the DV-1 perched water stream is only 10,000 gallons per month and is almost undetectable going through the 200 West Pump and Treat, it costs about \$30,000 a month to send it to ETF. DOE-RL added that there is a series of initiatives to move out of ETF, which could be a major cost savings. DOE-RL stated that the Tri-Parties have also been discussing the possibility of taking the ERDF water over to 200 West. An evaluation is under way to determine how that would be done, and the estimate for the payback is within a year.

Ecology asked why there is such a large cost different between going to ETF and 200 West. DOE-RL responded that ETF is a waste treatment facility that is intended to treat a variety of complex waste streams. DOE-RL stated that all the water goes through reverse osmosis twice, and once the solids are taken out they are turned into a powder.

Ecology stated that a kick-off meeting was held with DOE-RL regarding the 200-DV-1 RFI/CMS work plan, and requested an update at the next quarterly meeting on DOE-RL's progress with the draft work plan.

Sampling - DOE-RL stated that the cost of groundwater monitoring continues to increase, and an internal review is under way to identify why the costs are so high to obtain a sample. DOE-RL stated that it will be addressing lab costs for samples and reducing what is asked for in the sampling and analysis plans (SAPs). DOE-RL added that it has asked the contractor to conduct a stringent review over the next three years of the sampling costs and requirements in the SAPs, and the Tri-Parties will be brought in to participate in the review.

100-BC-5 Additional Monitoring Well and Aquifer Tube Installation – DOE-RL stated that efforts continue to get data from the deep wells to determine whether or not the shallow wells are needed. DOE-RL noted that there has been excellent turnaround from the regulator staff on reviewing the data.

Milestone Summary - DOE-RL pointed out that last month milestone M-024-65 was to be missed due to sequestration, and cost efficiencies have turned the well drilling back on and the milestone is now on schedule. DOE-RL stated that the

two milestones that are in dispute are being discussed at the unit manager level. EPA asked if a work plan was submitted associated with milestone M-015-38B (to be missed). DOE-RL responded that there were work plans before the operable units were regrouped, and there is no commitment to submit a work plan. CHPRC added that the work plan was in the draft stage, but it was never reviewed and finalized. Ecology asked when DOE-RL plans to provide the status that the M-015 major milestone is to be missed. DOE-RL stated that the status will be provided at the next quarterly milestone meeting, noting that unless some of the work is initiated next year or the milestone is changed, the outlook for the milestone will be grim.

Ecology stated that some of the monitoring wells have gone dry at the solid waste landfill, and there needs to be more discussion about the number of wells planned so they can be incorporated into the M-024 milestone. Ecology added that another well was proposed in the permit modification for LERF, and the public comment period will be starting at the end of January 2014. Ecology indicated that those activities will be kicking into M-024. DOE-RL indicated that discussions could be set up for those needs. DOE-RL stated that the three wells Ecology referred to have gone dry, and a meeting is scheduled with Ecology the first week in February 2014 to discuss the situation.

Ecology stated that there are a whole series of milestones associated with the 200 Area that are coming due, and there is the potential that those milestones will not be met. Ecology asked what DOE-RL is planning as far as discussing with Ecology and EPA regarding the different options for the milestones. DOE-RL responded that those milestones would be a topic for discussion during the unit managers meeting (UMM). Ecology agreed to defer discussion to the UMM.

Planned Activities Next 6 Months:

100 F/IU Area – EPA reported that the legal review on IU-2/6 and F Area has been completed, and comments on the RI/FSs should be transmitted in the near future.

200-ZP-1 – DOE-RL stated that four new injection wells will be installed. DOE-RL indicated that ZP-1 is somewhat limited by injection capability, partly due to some fouling, and that there was too much nutrient in the biological bed. The nutrient has been cut back and the wells have been rehabilitated.

200-UP-1 - DOE-RL stated that a proposal was made to the contractor to streamline and initiate treatment at UP-1 this fiscal year. A meeting is scheduled today to hear feedback from the contractor on the proposal to accelerate the treatment. DOE-RL noted that there would not be localized injection capacity for UP-1, but an evaluation would be done over the next year to determine the impact and the potential for installing injection wells next year.

200-BP-5 - Ecology stated that DOE-RL had indicated that a meeting could be held at the beginning of 2014 to discuss a work plan for BP-5 for the RI/FS.

DOE-RL stated that the BP-5 work plan is not currently funded.

Tri-Party Agreement River Corridor/Central Plateau Milestone Review
January 16, 2014

<u>Name</u>	<u>Organization</u>
✓ <u>Bob Long</u>	<u>DOE/AMRP</u>
✓ <u>JAMES LYNCH</u>	<u>DOE-ORP</u>
✓ <u>Nancy Ware</u>	<u>ECY</u>
✓ <u>Reed Kaldor</u>	<u>MSA</u>
✓ <u>Michael Turner</u>	<u>MSA</u>
✓ <u>Job Blackburn</u>	<u>WCH</u>
✓ <u>Gordon Dover</u>	<u>WCH</u>
✓ <u>Regena Williams</u>	<u>WCH</u>
✓ <u>Theresa Howell</u>	<u>WCH</u>
✓ <u>Rick Bond</u>	<u>Ecology</u>
✓ <u>KIM WELSH</u>	<u>ECOLOGY</u>
✓ <u>Lorna Dittmer</u>	<u>CHPRC</u>
✓ <u>Shelinda J Brown</u>	<u>Ecology</u>
✓ <u>Ben Ellison</u>	<u>DOE</u>
✓ <u>Elis Eberlein</u>	<u>Ecology</u>
✓ <u>Deborah Singleton</u>	<u>Ecology</u>
✓ <u>Vanessa Turner</u>	<u>DOE</u>
✓ <u>Michael Gillis</u>	<u>DOE</u>
✓ <u>Brian Charbonneau</u>	<u>DOE</u>
✓ <u>Tom Fletcher</u>	<u>DOE</u>

Tri-Party Agreement River Corridor/Central Plateau Milestone Review
January 16, 2014

<u>Name</u>	<u>Organization</u>
✓ <u>ROB PIRRO</u>	<u>MSA TPA</u>
✓ <u>Kathy Knox</u>	<u>Knox Court Reporting</u>
✓ <u>Mark French</u>	<u>DOE-RL</u>
✓ <u>Nina Menard</u>	<u>ECY</u>
✓ <u>Stanley Simpson</u>	<u>OPDS</u>
✓ <u>Dennis Faulk</u>	<u>EPA</u>
✓ <u>John Price</u>	<u>ECY</u>
✓ <u>PHILIP GENT</u>	<u>ECY</u>
✓ <u>ALICIA BORD</u>	<u>ECY</u>
✓ <u>Roger Quintero</u>	<u>DOE-RL</u>
✓ <u>Rod Cobos</u>	<u>EPA</u>
✓ <u>RAY COREY</u>	<u>DOE-RL</u>
✓ <u>Jana Hedges</u>	<u>ECY</u>
✓ <u>STEPHEN KORENHEWICZ</u>	<u>DOE-RL</u>
✓ <u>Michael Cline</u>	<u>DOE-RL</u>
✓ <u>RDH Debraud</u>	<u>DOE-RL</u>
✓ <u>Dib Goswami</u>	<u>Ecology</u>
_____	_____
_____	_____
_____	_____



Thursday, January 16, 2014
 Ecology Offices, Conference Room 3A/B
 3100 Port of Benton Blvd
 Richland, Washington

Agenda

River Corridor/Central Plateau Milestone Review Meeting Chairperson: R. J. Corey

Time	Milestones	Subject	DOE Presenter
8:30 a.m.	M-16, 89, 93 and 94	River Corridor Closure	Mark French
8:50 a.m.	M-16 and 93	100 K Soil Remediation, D4, ISS & Sludge Treatment	Roger Quintero
9:00	M-36	Life Cycle Report	Stephen Korenkiewicz
9:05	M-35	Conduct Biennial Assessments of Information	Ben Ellison
9:10 a.m.	M-83	PFP Closure	Bryan Foley
9:25 a.m.	M-26 and 91	Solid Waste Stabilization and Disposition	Mike Collins
9:35 a.m.	M-16 and 85	Central Plateau Remediation	Al Farabee
9:40 a.m.	M-15, 16, 24, 37 and 85	Soil and Groundwater Remediation	Briant Charboneau
10:00 a.m.	Adjourn Milestone Review		



PFP Closure Project

TPA Milestone: M-083



Larry Romine, Federal Project Director
Rick Bond, Ecology Project Manager
1st Quarter FY14
January 16, 2014



One Culture. One Team.

Quarterly Milestone Summary

(October - December 2013)

TPA Milestone	Due Date	Status	Milestone Description
M-083-24-T01	09/30/16	On Schedule	Submit Rv. 0 of the PFP Complex S&M Plan to Ecology
M-083-44	09/30/15	in Jeopardy	Complete transition of 234-5Z & -ZA, 243-Z, 291-Z and 291-Z-1 buildings to support decommission, deactivation, and preparation for dismantlement of the above grade portions of these PFP facilities
M-083-00A	09/30/16	On Schedule	Complete PFP Facility Transition & Selected Disposition Activities





Accomplishments – 1st Quarter

- In the last quarter, there have been no significant safety issues on the PFP Closure project
- Continued 234-5Z Backside Rooms & RMA/RMC Glovebox deactivation activities:
 - Glovebox (GB) HA-10 and the Room 170 Hood were isolated from the E4 ventilation during the month of November. The total gloveboxes removed to date is now at 86 percent complete (204 of 238).
- The breakthrough initiatives continued to be worked in order to support safe and compliant acceleration of D&D activities:
 - PremAire Breathing Air;
 - Reduce dependence on aging support systems; e.g. 17" vacuum; and,
 - Immobilize residual GB contamination and stabilize structure for disposal via Foaming.
- Completed PRF Canyon Crane Repair.
- Completed Part 1 (Data Collection) of the PFP Confinement Ventilation System Flow Test on 12/22/13.

Isolation of 234-5Z, HA-40F GB in Room 169.



Evaluating foam and foam-like materials for structural fill in gloveboxes.



Accomplishments – 1st Quarter cont'd:

- FY14 PMB update was provided, reviewed by DOE-RL and continues to focus on:
 - Keeping commitment to address high hazard risks first;
 - Addressing holdup materials in glove boxes first;
 - Holistic approach to complete by September 2016.
- 120 of 196 Pencil Tank units completed to date.
- Continued removal of asbestos insulation in the duct level for a total of 17,491 feet removed (73% of the total 24,000ft.).
- Continued disposition of Process Vacuum System Piping (36%; 2,545ft. of 7,161 ft.) & Process Transfer Lines (76%; 1,153 ft. of 1,525 ft.).
- Performed required min-safe inspections, surveillances and maintenance activities.



Safety Initiative - MSA PremAire™ supplied air system paired with Rich Industries Suit.



Project Baseline Performance

Contract to-Date (through December 2013)

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	\$645,491.4	\$632,085.1	\$663,738.4	(\$13,406.3)	-2%	(\$31,653.3)	-5%	\$932,505.9	\$964,159.2	(\$31,653.3)
ARRA	\$287,891.5	\$287,891.5	\$297,576.5	\$0	0%	(\$9,685.0)	-3.3%	\$287,891.5	\$297,576.5	(\$9,685)
Base	\$357,599.9	\$344,193.6	\$366,161.9	(\$13,406.3)	-3.7%	(\$21,968.2)	-6.3%	\$644,614.4	\$666,582.7	(\$21,968.3)



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Issues/Challenges

Regulatory Issue:

- None.

Non-Regulatory Issues:

- Managing culture change from operations to closure.
- Remaining gloveboxes are significantly more difficult to remove than planned.
- Equipment failures associated with aging building systems/components (e.g. PRF crane, Confinement Ventilation System) impacting D&D.
- Utilization of current resources/staff: productivity.
- Staff stability; layoffs, retirements, bump and roll.
- FY-14 Budget to sustain Performance Measurement Baseline.
- Continue efforts to identify alternate approaches to achieve efficiencies and cost & schedule savings.



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Planned Activities

234-5Z RMA/RMC Lines:

- Complete evaluation of alternatives to polyurethane foam for use in gloveboxes and conduct 2nd mock up demonstration to develop foaming and size reduction methods.
- Continue glovebox removal (9 forecasted for removal by end of March).

236-Z PRF:

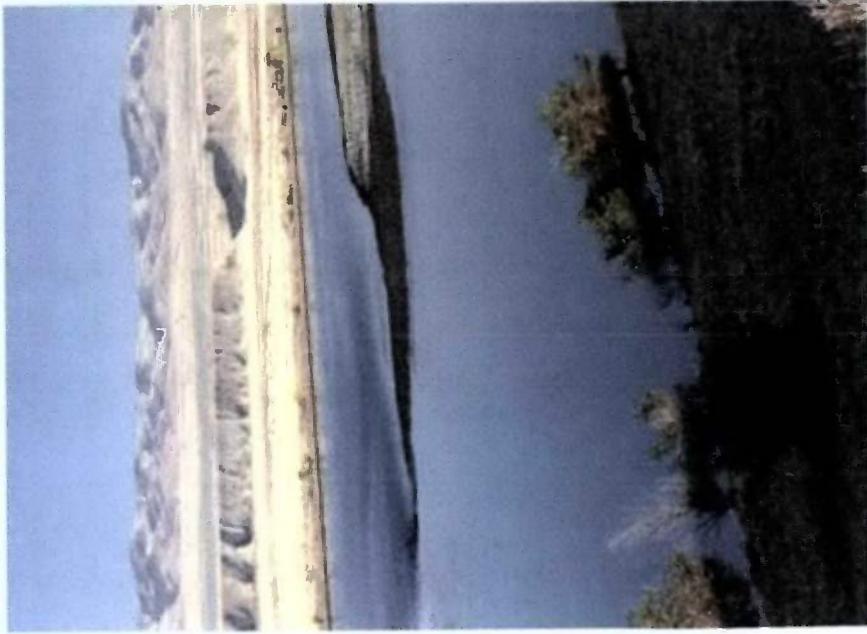
- Continue size reducing pencil tanks (20 units forecasted for removal by end of March).
- Complete all work to isolate gallery gloveboxes.

Establish Demolition Footprint:

- Initiate demolition of 9 ancillary infrastructure buildings currently located in the demolition footprint.

Monitor implementation of FY14 PMB Update and Validate based on Second Quarter Performance.





Soil and Groundwater Remediation Project Milestone Review

M-015-00, M-016-00, M-024-00, M-037-00

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

First Quarter FY2014
January 16, 2014

Accomplishments – 4th Quarter 2013 & 1st Quarter 2014 (July – Dec 2013)

➤ Issued 300 Area Final Record of Decision

Issued November 2013

➤ Completed TPA Interim Milestone M-015-77

Install additional aquifer tubes as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan/SAP

Due November 30, 2013 (completed October 14, 2013)



Aquifer Tube installation at 100-BC

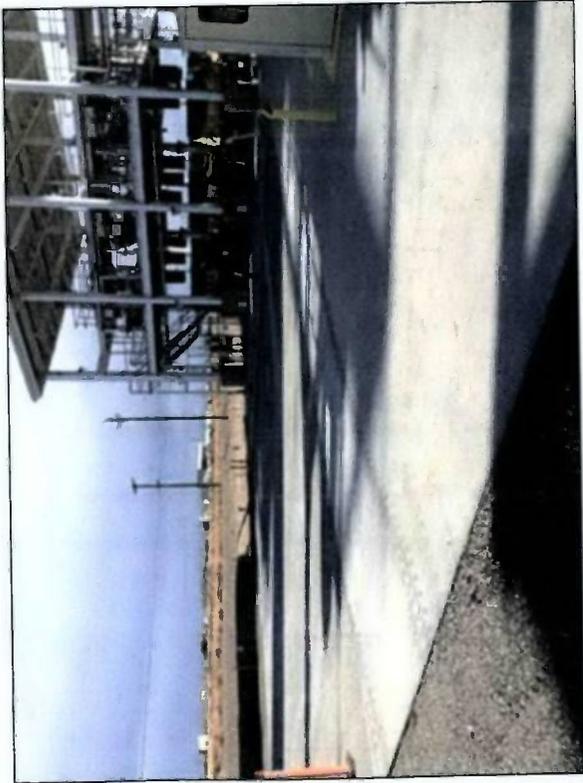


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Accomplishments – 4th Quarter 2013 & 1st Quarter 2014 (July – Dec 2013)

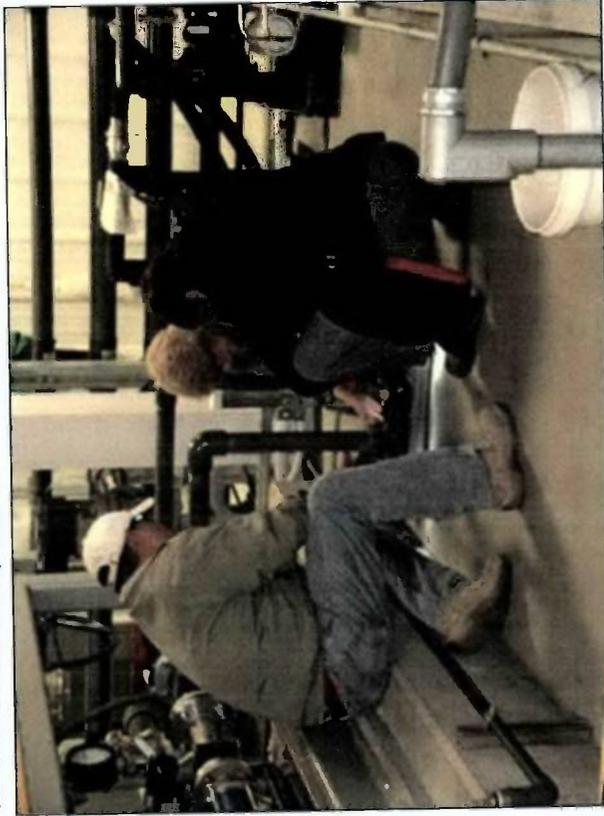
200 West Area Groundwater Treatment Facility

- Completed all of the operations test procedure fieldwork
- Expanded concrete pad on east side of chemical treatment building to facilitate loading of resin and sludge
- Average contaminant concentrations are being reduced to less than specified ROD cleanup levels
- New top and deep bed eductors were added to fluidized bed reactors to control carbon media growth and reduce carbon carry over
- Received approval to accept water generated from well rehabilitation



Expanded concrete pads on east side of 200 West P&T (above)

Weld inspection during rotary drum thickener (RDT) modification work, which will increase RDT reliability (below)



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Accomplishments – 4th Quarter 2013 & 1st Quarter 2014 (July – Dec 2013)

- **200-DV-1 – B Area Perched Water Extraction System**
 - Removed 38,868 gallons of effluent from the perched water zone, including extraction of
 - 10.2 kilograms of uranium
 - 57.4 kilograms of nitrates
 - 4.0×10^9 pCi of Tc-99
- **River Corridor and Central Plateau Groundwater**
 - Treated 923 million gallons of groundwater
 - Removed 25,805 kg of contaminants from the groundwater
- **Drilling and Decommissioning**
 - 10 wells drilled (from 100-HR-3, 100-KR-4, 100-BC-5 OUs and M-024 milestone)
- **Sampling**
 - 4,522 samples collected
 - 8,068 analyses performed



Accomplishments – 4th Quarter 2013 & 1st Quarter 2014 (July – Dec 2013)

100-F/IU RI/FS and Proposed Plan

- *Proposed Plan was submitted for EPA Legal review*

100-BC-5 Additional Monitoring Well and Aquifer Tube Installation

- *Completed sampling for chromium stable isotopes; results used to evaluate natural attenuation processes at 100-BC-5*
- *Aquifer tube installation was completed prior to the milestone due date and sampling was initiated; the use of Hach Field Test Kits for the analysis of hexavalent chromium resulted in reduction of samples that would have otherwise required laboratory analysis*
- *Installation of monitoring wells is on schedule*



Plateau Remediation Company

Milestone Summary

TPA Number	Milestone or Target Date	Milestone/Target Title	Status
M-015-00		Complete RI/FS (or RFI/CMS & RI/FS) Process for All Non-Tank Farm Operable Units Except for Canyon/Associated Past Practice Waste Site Operable Units Covered in M-85-00	
M-015-77	11/30/13	Install additional aquifer tubes as specified in revised 100-BC-1,2 and 5 RI/FS Work Plan/SAP	COMPLETE
M-015-76	2/28/14	Install additional wells monitoring network as specified in revised 100-BC-1,2 and 5 RI/FS Work Plan/SAP	ON SCHEDULE
M-015-112	2/28/14	Submit Draft B 200-IS-1 RFI/CMS/RI/FS Work Plan to Ecology with Schedule Dates	IN DISPUTE
M-015-113	2/28/14	Submit Draft B 200-SW-2 RFI/CMS/RI/FS Work Plan to Ecology Including Schedule	IN DISPUTE
M-015-38B	10/30/14	Submit Revised FS Report & Proposed Plan for CW-1, CW-3, OA-1 to EPA	TO BE MISSED
M-024-00		Complete Well Installations with RCRA/CERCLA Requirements	
M-024-64-T01	8/1/13	Conclude Discussions of Well Commitments	COMPLETE
M-024-58G	6/1/14	Initiate Discussions of Well Commitments	ON SCHEDULE
M-024-65-T01	8/1/14	Conclude Discussions of Well Commitments	ON SCHEDULE
M-024-65	12/31/14	Complete the Construction of all Wells Identified in M-24-11-01	ON SCHEDULE
M-037		RCRA Closures	
M-037-02	6/30/14	Submit Revised Closure Plans to support TSD closure for five (5) TSD Units:	ON SCHEDULE



Project Baseline Performance

Contract to date through December 2013

WBS 030/ 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 Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
RL-0030.01 RL 30 Operations	585.7	584.1	568.3	-1.6	-0.3	15.8	2.7	1,148.6	1,130.1	18.5

Numbers are rounded to the nearest \$0.1M.



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Planned Activities

Next 6 months

100 BC-5 Operable Unit

- Continuing groundwater characterization

100 K Area

- Issue Rev. 0 of the 100-KR-4 OU RD/RAWP for the Interim Action, Monitoring Plan, and Operations and Maintenance Plan
- Complete well realignment activities

100 F/IU Area

- Complete public review and issue Rev. 0 of the RI/FS & PP
- Support Final ROD preparation

100 D&H Area

- Issue Rev. 0 of the RI/FS & PP
- Issue Rev. 0 of the 100-HR-3 OU RD/RAWP for the Interim Action, Monitoring Plan, and Operations and Maintenance Plan
- Complete well realignment activities



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Planned Activities

Next 6 months (cont.)

100 N Area

- *Initiate resolution of Ecology comments on Draft A of the RI/FS*
- *Complete additional 500 ft of aquifer apatite injections*
- *Complete planning actions for vadose zone jet apatite injection to support FY15 start*

200-ZP-1

- *Install 4 new injection wells to increase P&T system throughput to greater than 2000 gpm*
- *Issue annual P&T performance report*

200-UP-1

- *Complete design for the uranium system and initiate construction and well drilling*

300 Area

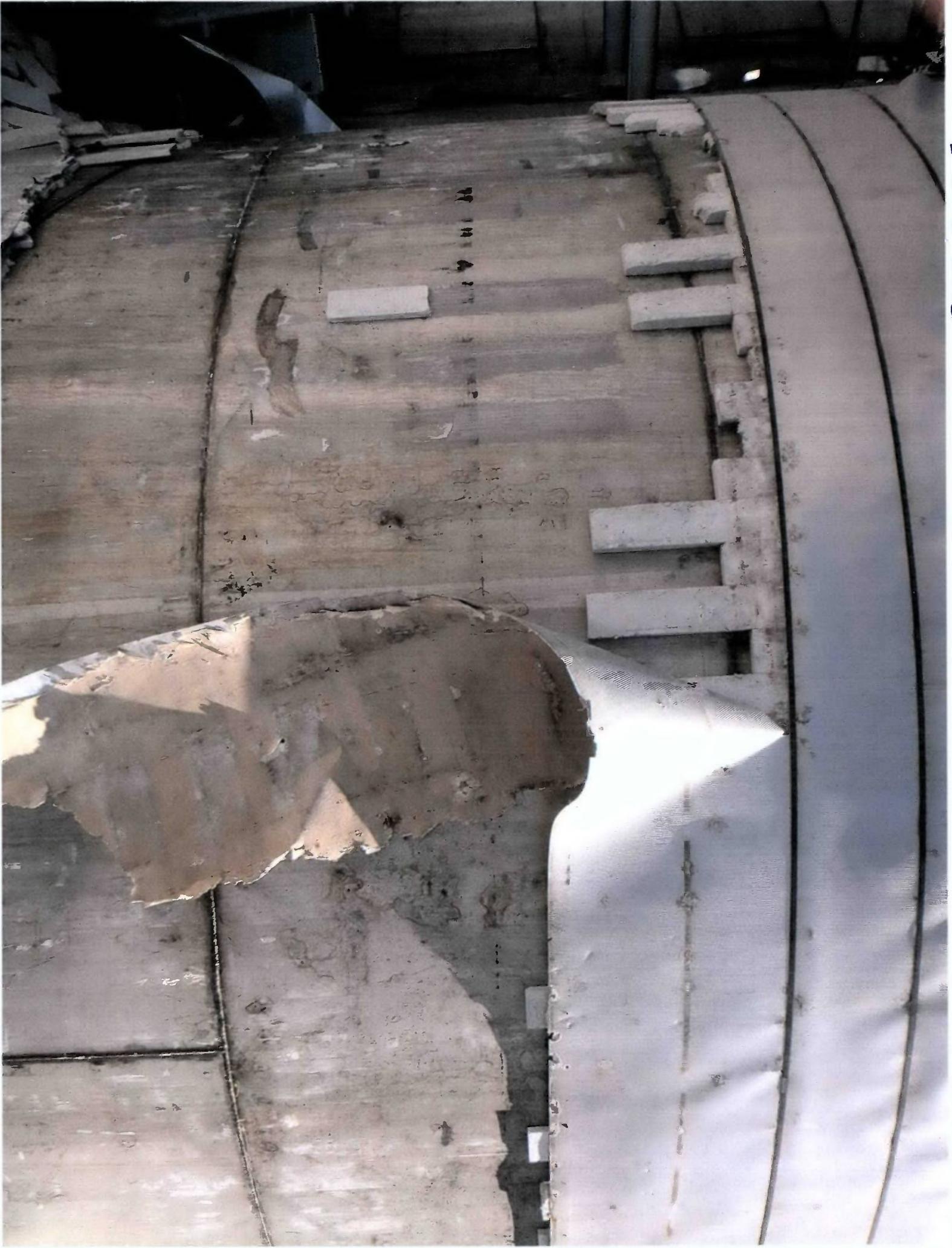
- *Submit Draft A RD/RA Work Plan to EPA for review*



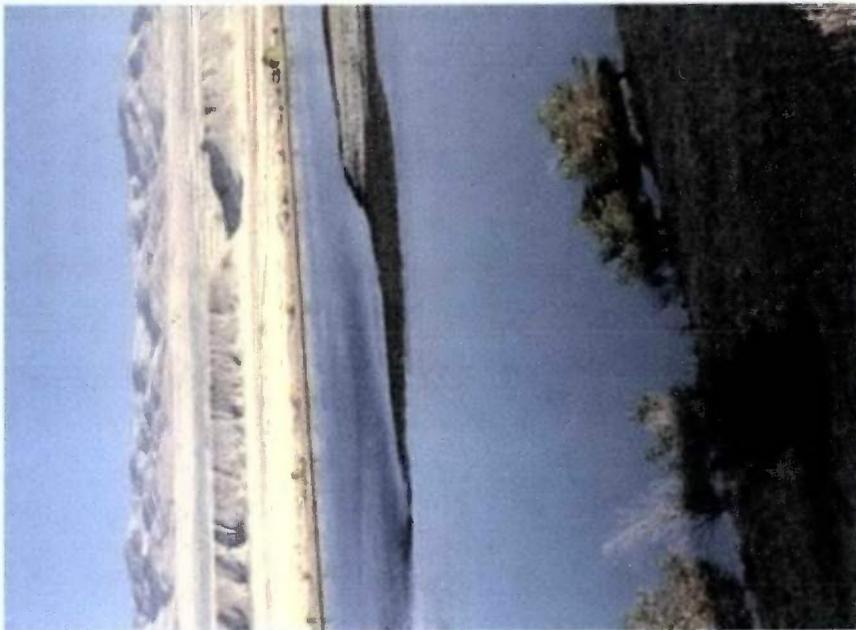
TANK 11











Central Plateau Remediation Project RL-40 Milestone Review M-016-00, M-085-00

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

First Quarter FY2014
January 16, 2014



U.S. DEPARTMENT OF
ENERGY



Accomplishments

TPA Milestones

- *None completed during 4th Quarter FY2013 or 1st Quarter FY2014*

Complete Waste Information Data Services (WIDS) Site Surveillances

- *Completed 200W and 200E Tri-Annual Area Waste Information Data System (WIDS) site surveillances*
- *Completed Quarterly Treatment, Storage and Disposal (TSD) WIDS site surveillances*
- *Completed Annual Radiation Area Remedial Action (RARA) Waste Site radiological surveillance*



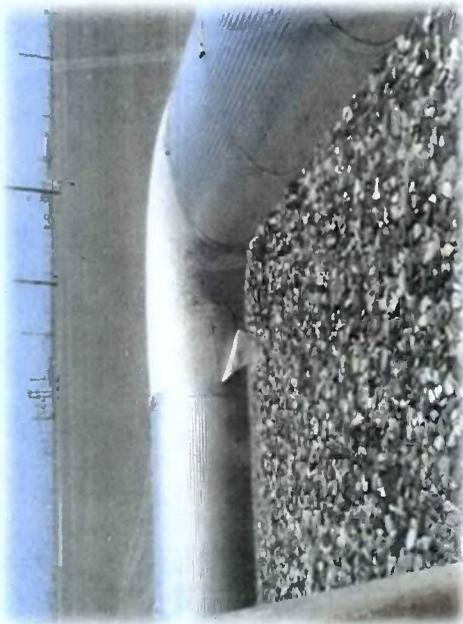
Accomplishments

Completed Surveillances

- *Completed Walkdown for the Annual Abandoned Steam Line Surveillance*



Abandoned Steam Line Walkdown



Accomplishments

Completed Surveillances (cont.)

- *U Plant*
- *224T*
- *Plutonium Uranium Extraction Plant (PUREX)*
- *Reduction-Oxidation S Plant (REDOX)*
- *241-CX Hexone Tank System (supported 201-C Process Building)*
- *Miscellaneous Facilities Annual Surveillance:*
 - *231-Z*
 - *242B/BL*
 - *222T*
 - *Hot Semi Works*
 - *Industrial Facilities*



Accomplishments

Minimum Safe/Maintenance Activities

- *Initiated site prep for PUREX Tank 11 asbestos abatement*
- *Completed monthly preventive maintenance activities and radiological facility surveillances*
- *Completed WIDS site housekeeping (weed spraying and hot tumbleweed removal)*
- *Supported 200E/200W site exercise*
- *Repaired PUREX vacuum pump 1*
- *Completed Nondestructive Analysis of B Plant conex boxes*
- *Replaced 241-CX utility power source*
- *Completed re-lamp activities at REDOX and PUREX*



PUREX Tank 11 site prep



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Milestone Status

TPA Number	Milestone Due Date	Milestone Title	Status
M-085-00 RL 40 – Complete Response Actions for the Canyon Facilities/Associated Past Practice Waste Sites, other Tier 1 CP Facilities not covered by existing milestones, and Tier 2 CP Facilities			
M-085-02	9/30/15	Submit change package to establish schedule for submittal of RI/FS Work Plans for 200-CB-1, 200-CP-1, and 200-CR-1 OUs and a schedule for submittal of the RAWP for 224B and 224T Plutonium Concentration Facilities.	ON SCHEDULE
M-085-01	9/30/22	Submit Change Package to establish date for major Milestone M-85-00	ON SCHEDULE
M-016-00 RL 40 – Complete Remedial Actions for all Non-Tank Farm and Non-Canyon Operable Units			
M-016-200A	9/30/17	Complete U Plant Canyon (221-U) Demolition in accordance w/ RD/RAWP	ON SCHEDULE
M-016-200B	9/30/21	Complete U Plant Canyon (221-U) Barrier Construction in accordance w/ the RD/RAWP	ON SCHEDULE



Project Baseline Performance

Contract to date (Through December 2013)

	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)
BS 040/RL-0040 Nuclear Facility D&D	378.6	378.5	349.1	-0.1	-0.0	29.4	7.8	482.7	453.4	29.3
Total	378.6	378.5	349.1	-0.1	-0.0	29.4	7.8	482.7	453.4	29.3

Numbers are rounded to the nearest \$0.1M.



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Plateau Remediation Company

Planned Activities

Next 6 months

- Perform 241CX, U Plant, PUREX, REDOX, 224T Annual Surveillances
- Pump PUREX Condensate Tanks
- Complete Abandoned Steam Line Surveillance report
- Perform PACM (Potential Asbestos Containing Material) WIDS Site Surveillance
- Complete PUREX Tank 11 Asbestos Clean-Up
- Evaluating options to move forward with WESF Interim Dry Storage Project





**Solid Waste Stabilization
and Disposition Project
RL-0013
Milestone Review
M-091/M-026**

January 16, 2014



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Accomplishments – April-June 2013

- M-091-03 – Project Management Plan (PMP)
 - CY 2012 plan submitted 06/12/13
 - Received Ecology comments 08/12/13
 - Response to comments provided 09/10/13
 - Ecology and DOE met 10/16/13 to disposition comments. Most dispositioned in the meeting; Ecology reviewing the rest.
- M-026-01 – Land Disposal Restrictions (LDR) Report
 - 2013 Summary Report (for CY 2012) submitted 04/11/13
 - Response to comments provided 07/31/13



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Milestone Status

- M-091-40 Retrievably Stored Waste (CH) – Complete the retrieval and designation of CH Retrievable Stored Waste in burial grounds by 09/30/16
 - Target M-91-40V-T01: Retrieve 250 m³ by 09/30/13 – No waste retrieved in FY 2013, Ecology and EPA were informed 05/23/13
 - Target M-91-40W-T01: Retrieve 250 m³ by 09/30/14 – To be missed, no waste will be retrieved in FY 2014
 - There were no substrate sampling and analysis results on July-September 2013 or October-December 2013
- M-091-41 Retrievably Stored Waste (RH) – Complete non-caisson retrieval by 09/30/16 – No waste to be retrieved in FY 2014
- M-091-42 MLLW (CH, small container) – Complete treatment by 09/30/17
 - No M-091-42 waste treated in CY 2013
 - 25 m³ are in aboveground storage



Milestone Status

- M-091-43 MLLW (RH and large container) – Complete treatment by 09/30/17
 - No M-091-43 waste treated in CY 2013
 - 42 m³ are in aboveground storage
- M-091-44S TRUM Waste (RH and large container) – Certify 300 m³ by 09/30/18
 - 54 m³ repackaged into a WIPP-certifiable waste form in CY 2013. 182 m³ repackaged towards M-091-44S milestone.
 - 7,077 in aboveground storage (includes newly generated waste)
- M-091-46 TRUM waste (CH, small container) – Complete the certification of small CH TRUM waste
 - Target M-91-46C-T02: Certify 125 m³ by 09/30/13 – No waste certified in FY 2013, Ecology and EPA were informed 05/23/13
 - Target M-01-46D-T03: Retrieve 125 m³ by 09/30/14 – To be missed, no waste will be certified in FY 2014
 - 1,802 m³ are in aboveground storage (includes newly-generated waste)



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

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Project Baseline Performance
Contract to Date through December 2013

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	47,823.3	47,823.3	46,305.3	0.0%	3.2%
Waste Receiving and Packaging Facility (WRAP)	32,793.6	32,793.2	35,372.2	0.0%	-7.9%
T Plant	57,655.4	57,655.4	50,130.3	0.0%	13.1%
MLLW Treatment	43,182.5	43,182.5	37,189.9	0.0%	13.9%
TRU Waste Retrieval	99,991.6	99,991.6	112,260.0	0.0%	-12.3%
TRU Waste Repackaging	47,915.7	47,448.0	43,915.5	-0.3%	8.1%
TRU Waste Disposition	30,934.4	30,934.4	22,343.7	0.0%	27.8%
Project Management	88,556.8	88,553.6	83,950.9	0.0%	5.2%



EM Environmental Management

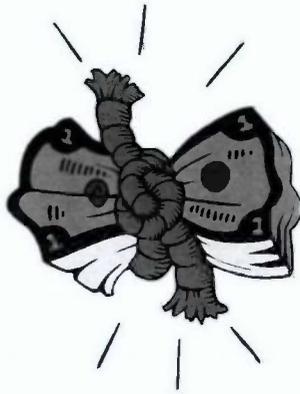
safety ❖ performance ❖ cleanup ❖ closure

Actions Planned for Next Six Months

- Repackage about 50 cubic meters of M-091-044 waste
- Continue surveillance and maintenance activities at CWC, WRAP, T Plant, and the LLBGs
- Continue supporting permitting and compliance activities
- Continue to work with Ecology on agreed order and permit issues
- Submit Quarterly Burial Ground Sampling Results
- PMP
 - Complete resolution of CY 2012 plan comments
 - Submit CY 2013 plan by 06/30/14
- LDR Report
 - Complete CY 2012 report
 - Submit CY 2013 report by 04/30/14



Hanford Lifecycle Scope, Schedule and Cost Report

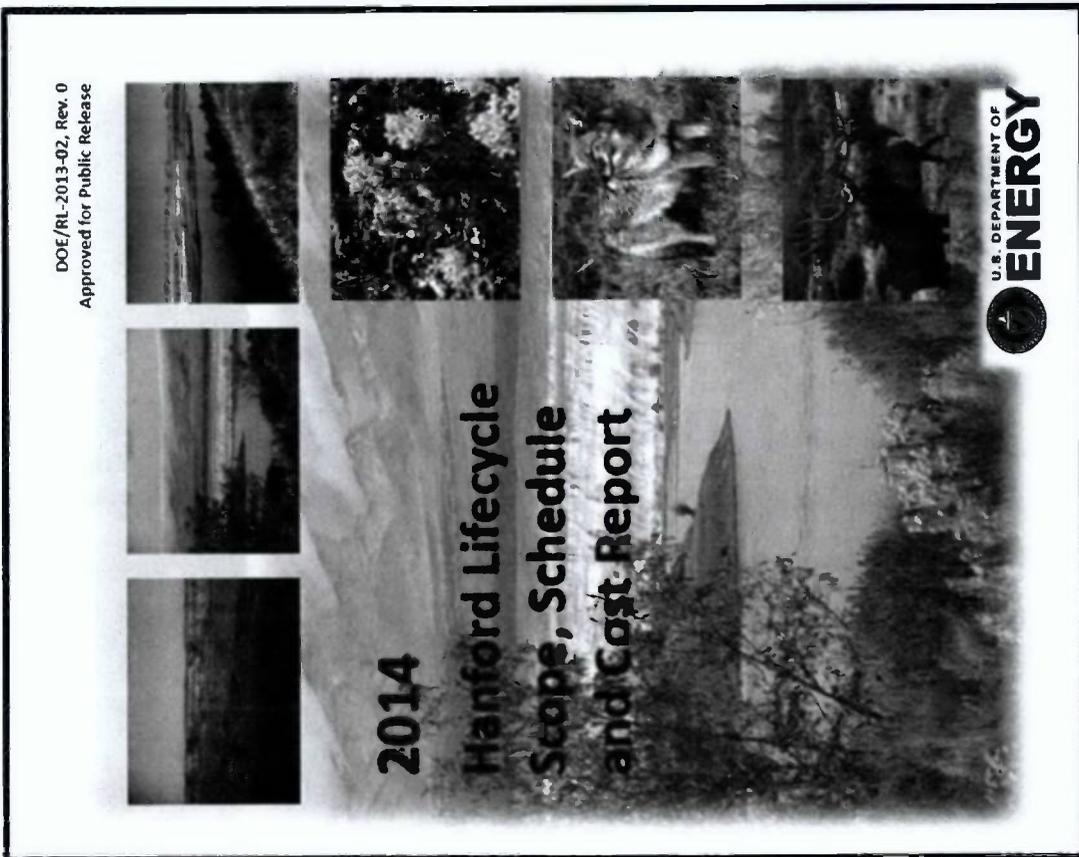


TPA Milestone: M-036-01D

Quarterly Performance Report

October - December, 2013

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 2014 Lifecycle Report is the fourth 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 are no performance issues related to development and preparation of the 2014 Lifecycle Report.



SIGNIFICANT ACCOMPLISHMENTS FOR THE LAST THREE MONTHS



1. Completed incorporation of comments into the Final 2014 Lifecycle Report which was delivered to DOE on December 16, 2013.
2. Reviewed major changes between the 2013 and 2014 Lifecycle Reports and discussed whether an alternatives analysis should be included in the 2015 Lifecycle Report at the October 29, 2013 Project Manager Meeting (PMM).
3. The TPA Milestone Managers agreed that the 2015 Lifecycle Report would not include an alternatives analysis.



SIGNIFICANT PLANNED ACTIONS FOR THE NEXT SIX MONTHS



1. DOE will submit the 2014 Lifecycle Report to EPA and Ecology by January 31, 2014.
2. A Fact Sheet and Listserv notice will be issued by the three parties when the 2014 Lifecycle Report is posted on "www.Hanford.gov" in February 2014.
3. The TPA Milestone Managers will review any comments received on the 2014 Lifecycle Report at the April 2014 PMM and consider any changes to be incorporated in the 2015 Lifecycle Report.
4. DOE will develop the planning case to be presented in the 2015 Lifecycle Report by June 1, 2014.



OTHER SIGNIFICANT ISSUES



BUDGET/COST STATUS

No major issues identified.

ISSUES

No major issues identified.

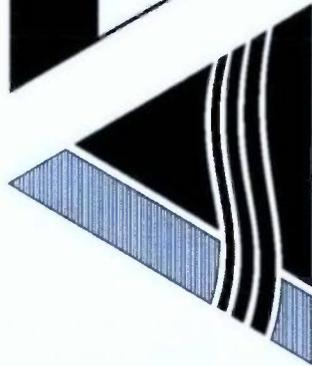
NON-TPA REGULATORY ISSUES/POTENTIAL IMPACTS TO TPA

No major issues identified.



TPA Quarterly Review

For Period: October - December 2013



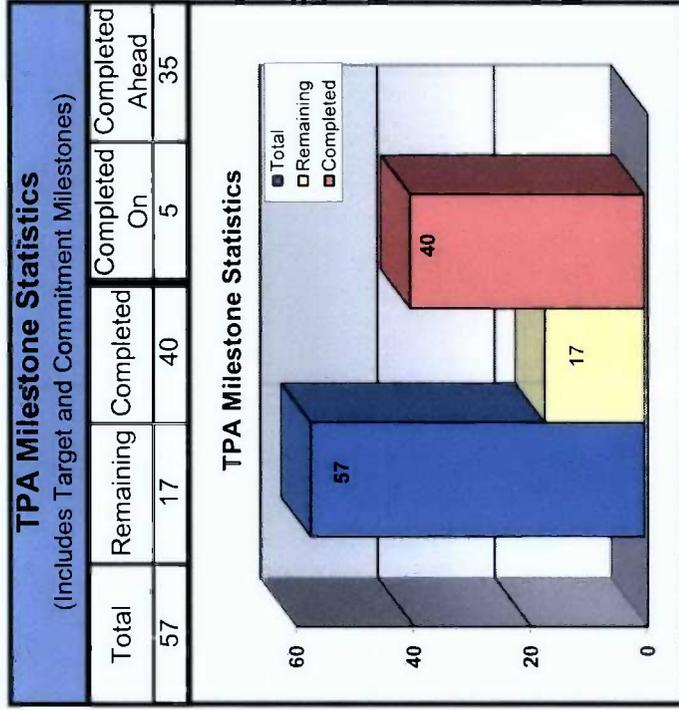
Tri-Party Agreement

River Corridor Milestones:

M-16 M-89 M-92 M-94

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

January 16, 2014



Quarterly Summary (October – December 2013)

- **Completed TPA Milestones:**
 - None for this reporting period.
- **Approved Change Requests:**
 - None for this reporting period.

RIVER CORRIDOR CLOSURE PROJECT

For Period: October – December 2013

TPA MS No.	Compliance Date	Title	Status	Comments
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M-16 Milestones - Remedial Action (milestones through 12/31/2015)

M-16-75	03/31/14	Initiate Substantial and Continuous Remediation on the 309 Facility Dedicated Radioactive Liquid Waste Sewer (300 RLWS) and Associated Process Sewer Systems	On schedule	
M-16-145	03/31/14	Complete 100-K Area Interim Response Actions for Following Sites: 128-K-2, 100-K-78, 600-29, 100-K-84, 100-K-86, 100-K-89, 100-K-92, 100-K-87, 100-K-91, 100-K-93, 100-K-95, and 118-K-1	On schedule	
M-16-146	03/31/14	Complete 100-B/C Area Interim Response Actions at 100-C-7 and 100-C-7:1 Waste Sites	On schedule	
M-16-149	03/31/15	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	On schedule	
M-16-159	03/31/15	Complete Interim Response Actions for Following 100-D and 100-H Area Sites: 100-D-14, 100-D-56, 100-D-62, 100-D-63, 100-D-65, 100-D-66, 100-D-71, 100-D-73, 100-D-75:2, 100-D-76, 100-D-78, 100-D-80, 100-D-81, 100-D-96, 100-D-101, 100-D-102, 116-DR-3, 118-D-6.4, 1607-D1, 1607-D2, 100-H-37, 100-H-43, 100-H-48, 100-H-52, 100-H-57	On schedule	

RIVER CORRIDOR CLOSURE PROJECT

For Period: October – December 2013

TPA MS No.	Compliance Date	Title	Status	Comments
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M-16 Milestones - Remedial Action (milestones through 12/31/2015) (Continued)

M-16-163	03/31/15	Complete Interim Response Actions (Excluding Backfill and Revegetation) for Following 58 100-N Area Waste Sites : 100-N-6, 100-N-16, 100-N-22, 100-N-23, 100-N-24, 100-N-25, 100-N-26, 100-N-29, 100-N-30, 100-N-31, 100-N-32, 100-N-36, 100-N-37, 100-N-38, 100-N-57, 100-N-59, 100-N-60, 100-N-61, 100-N-63, 100-N-64, 116-N-2, 116-N-4, 118-N-1, 120-N-3, 120-N-7, 124-N-1, 124-N-2, 124-N-3, 124-N-9, 128-N-1, 1908-N, 1908-NE, UPR-100-N-1, UPR-100-N-2, UPR-100-N-3, UPR-100-N-4, UPR-100-N-5, UPR-100-N-6, UPR-100-N-7, UPR-100-N-8, UPR-100-N-9, UPR-100-N-10, UPR-100-N-12, UPR-100-N-13, UPR-100-N-14, UPR-100-N-19, UPR-100-N-21, UPR-100-N-22, UPR-100-N-23, UPR-100-N-25, UPR-100-N-26, UPR-100-N-29, UPR-100-N-30, UPR-100-N-31, UPR-100-N-32, UPR-100-N-36, UPR-100-N-39, UPR-100-N-43. Initiate Operations of In-Situ Bioremediation Systems for UPR-100-N-42, in accordance with approved 100-N RDR/RAWP	On schedule	
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)	On schedule	

M-89 Milestone - 324 Bldg Non-Permitted MW Units Closure (milestones through 12/31/2015)

M-89-06-T01	09/30/14	Submit 30% Design of Closure of Mixed Waste Units in 324 Bldg REC B-Cell, REC D-Cell, and High Level Vault and Low Level Vault That Includes a Schedule to Complete the Design	On schedule	
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RIVER CORRIDOR CLOSURE PROJECT

For Period: October – December 2013

TPA MS No.	Compliance Date	Title	Status	Comments
M-92 Milestone - 300 Area Special Case Waste				
M-92-16	09/30/15	Complete Removal and Transfer, and Initiate Storage of Phase III 300 Area Special Case Waste and Materials	On schedule	The remaining action to complete this milestone is disposal of the 340 vault at ERDF, scheduled for February 2014.
M-94 Milestones - 300 Area Surplus Facilities Disposition (milestones through 12/31/2015)				
M-94-10	09/30/15	Complete Disposition of 300 Area Surplus Facilities Identified in the Removal Action Work Plan(s) for the 300 Area Facilities Exclusive of the 324 Bldg and its Ancillary Buildings and Structure	On schedule	

Significant Accomplishments – For Last 3 Months:

M-16 – Remedial Action / Risk Assessment

- Completed push-probe sampling efforts at UPR-100-N-42.
- Received approval of 23 waste site closure documents.
- Conducted briefings with RL, EPA, and CHPRC on archeological findings and sample results from 100-K shoreline characterization activities.
- Continued backfill at 100-C-7:1 and revegetation of 100-C-7:1 stockpile areas.
- Continued remediation activities at 100-N Area.



Removal of 151B Switchyard Large Transformer for Recycle



Lift Preparations for Removal of 309 PRTR

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

- Completed technical and commercial evaluation of bid proposals for remediation of 300-296 waste site under B-Cell and initiated selection and justification documentation.
- Continued infrastructure evaluations and repairs required to maintain minimum safe operations of the 324 Complex.

M-94 – 300 Area Surplus Facilities Disposition

- Completed above-grade demolition of 326 Material Sciences Laboratory.
- Completed below-grade demolition/loadout of 3760 Technical Library and 323BA Boiler Annex.
- Completed 3730 gamma monolith removal and disposal at ERDF.
- Removed contaminated soil beneath 340 Waste Neutralization Facility vault.
- Continued preparations to lift, load, and transport 340 vault and 309 Plutonium Recycle Test Reactor (PRTR) to ERDF for disposal.

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

ERDF

- For period October - December, disposed ~ 224,000 tons of waste; bringing total to ~ 15.6 million tons disposed in ERDF.
- Received 3730 gamma monolith.
- Treated and disposed of all long-length items received from Tank Farms to date.
- Poured waste pad in support of January receipt of 309 PRTR.

Significant Actions Planned – For Next 3 Months:

M-16 – Remedial Action / Risk Assessment

- Complete backfill, revegetation, and closeout documentation process for 100-C-7:1.
- Complete backfill, revegetation, and closeout documentation process for 100-K Area waste sites.
- Commence remediation activities of 300 RLWS in accordance with M-16-75.
- Begin loadout campaign of land disposal restricted (LDR) waste from 100-D-100, 100-D-104, and 100-D-30 for treatment and disposal at ERDF.

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

- Award subcontract for remediating contaminated soil under B-Cell.
- Maintain minimum safe conditions until path forward is determined for remediation of 300-296 waste site under B-Cell.



Disposal of 3730 Gamma Monolith at ERDF

M-94 – 300 Area Surplus Facilities Disposition

- Continue preparation for removal of 309 PRTR, 340 vault, and 3730 large hot cell and transport to ERDF.
- Complete above-grade loadout of 326 Material Sciences Laboratory.
- Complete below-grade demolition/loadout of 3730 Gamma Irradiation Facility.

ERDF

- Receive 309 PRTR.
- Receive 340 vault.
- Receive 3730 large hot cell.
- Treat and dispose LDR waste from 100-D Area.

PERFORMANCE SUMMARY
 Contract Inception (8/27/05) through December 2013
 (\$K)

	IPB		CUMULATIVE				Previous Quarter Comparison			
	BAC	EAC	BCWS	BCWP	ACWP	SCHEDULE VAR (\$)		COST VAR (\$)		
						Sep	Dec	Sep	Dec	
D4	624,317	621,716	614,874	594,903	522,717	-20,282	-19,971	84,828	72,187	
Reactor ISS	75,883	81,777	75,883	75,883	81,777	0	0	-5,877	-5,894	
Field Remediation	808,418	941,509	712,271	673,872	650,369	-34,349	-38,398	28,736	23,504	
Waste Operations	592,700	481,017	505,875	532,114	422,515	38,286	26,239	111,029	109,599	
ESFC	76,680	62,931	75,472	70,888	56,846	-4,591	-4,584	14,254	14,042	
Mission/General Support	365,420	377,466	352,043	352,043	321,270	0	0	33,941	30,773	
Transition	3,979	3,747	3,979	3,979	3,747	0	0	232	232	
Contingency						0	0	0	0	
TARGET COST TOTAL	2,547,397	2,570,163	2,340,398	2,303,683	2,059,240	-20,936	-36,715	267,142	244,442	

Schedule Variance (PMB): (\$36,715K)

- Negative variance primarily associated with remediation delays at 100-D and 100-N, delayed start of remaining waste sites around 309 Building, 300 Area south of Apple Street due to PNNL retained facilities, and sequestration.
- Delay in D4 due to waste site discovered beneath 324 Building.
- Negative variance offset significantly by ERDF transportation, treatment, and disposal support to accelerated work in FR and D4 Projects.

Cost Variance (PMB): \$244,442K

- Significant underruns experienced in 300 Area building characterization, deactivation, and demolition activities; and in utility charges and surveillance and maintenance activities.
- 100-B/C, 100-D, 100-F, and 100-IU-2/6 remediation underruns due to favorable subcontract rates, partially offset by project support costs at all active dig sites.
- Costs have been less than planned due to Waste Operations efficiencies achieved in waste treatment, transportation, and construction.

RCC Issues

100-D-100

- **Issue:** 100-D-100 has been remediated to groundwater and high concentrations of hexavalent chromium have been detected at the bottom of the excavation. Additionally, low levels of hexavalent chromium were detected in the lower northeast sidewall of the excavation.

Status: Additional actions for the base of the excavation are being evaluated. The path forward for the sidewall is being resolved with the regulators.

100-N-85

- **Issue:** Ecology has determined that not enough information exists at the 100-N-85 waste site to move forward with a No Action reclassification of the waste site.

Status: A preliminary bioremediation design has been developed. Path forward includes installation of a borehole and collection of additional samples. If it is determined that a bioventing well is required, a Memo to File or an ESD to the ROD will be required to clarify that the remedy for the site is in-situ bioremediation.



100K Soil Remediation, D4, ISS, & Sludge Treatment Project

TPA Milestone Series: M-016 and M-093

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

First Quarter FY 2014
January 16, 2014



Accomplishments

4th Quarter 2013 & 1st Quarter 2014

Sludge Treatment Project Phase 1- Removal of Containerized Sludge

- Completed TPA Interim Milestone M-016-174, Complete *Final Design of Sludge Retrieval & Transfer System, due September 30, 2013*



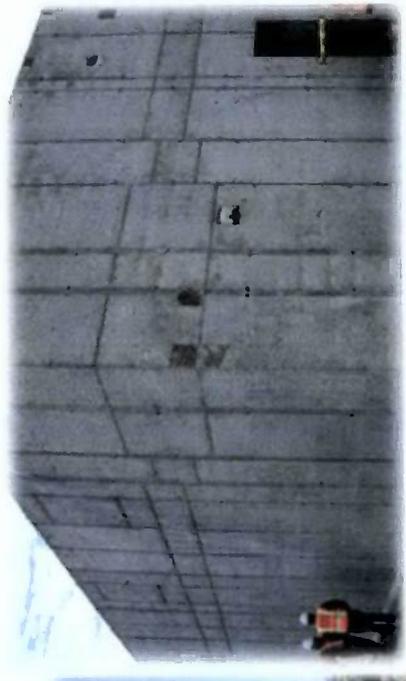
Accomplishments

4th Quarter 2013 & 1st Quarter 2014

Sludge Treatment Project Phase 1-

Removal of Containerized Sludge (cont.)

- **Begin Sludge Removal from 105-KW Fuel Storage Basin**
(M-016-175, due 9/30/14 - At Risk)
 - Remobilized construction team for the 105-K West Basin Annex
 - Major concrete placements for the 105-K West Basin Annex were completed in December.
 - Fabrication of building structural steel has started and the overhead crane has been fabricated and delivered.



Accomplishments

4th Quarter 2013 & 1st Quarter 2014

Sludge Treatment Project Phase 1- Removal of Containerized Sludge (cont.)

Begin Sludge Removal from 105-KW Fuel Storage Basin (M-016-175, due 9/30/14 - At Risk)

- Started the *Integrated Process Optimization Demonstration (IPOD)* at MASF to demonstrate operability of sludge retrieval system
- IPOD optimizes system performance and reliability of the system prior to procurement and installation of equipment at 100K



Control Panel Wiring
Preparing for IPOD



Control Panel Operation During IPOD



CH2MHILL
Plateau Remediation Company



Accomplishments

4th Quarter 2013 & 1st Quarter 2014

Sludge Treatment Project Engineered Container Retrieval and Transfer System (ECRTS)

- Completed ECRTS Critical Decision 2/3 and Preliminary Design Safety Analysis (PDSA) package
- Initiated design to modify T Plant cells to receive Sludge Transportation and Storage Containers
- DNFSB closed issues related to potential sludge spray leak accidents



Accomplishments

4th Quarter 2013 & 1st Quarter 2014

100 KE Reactor Surveillance and Maintenance

- *Approved and implemented the Facility Hazard Classification (FHC)*

100K D4

- *Issued D4 Project Management Plan, Review Board Charter, and Initiation and Execution Procedure*
- *Removed and disposed shield plates from the 105-KE FSB Discharge Chute*

100 K Minimum Safe Activities

- *Completed Annual Institutional Controls Inspection*



Milestone Status

TPA Number	Due Date	Description	Status
M-016-174	09/30/13	Complete Final Design of Sludge Retrieval and Transfer System	Complete
M-016-175	09/30/14	Begin Sludge Removal from 105-KW Fuel Storage Basin	At Risk
M-016-173	03/31/15	Select K Basin Sludge Treatment and Packaging Technology and Propose New Interim Sludge Treatment and Packaging Milestones	At Risk
M-016-143	12/31/15	Complete the Interim Response Actions for the 100 K Area Within the Perimeter Boundary and to the River for Phase 2 Actions	At Risk
M-016-176	12/31/15	Complete Sludge Removal from 105-KW Fuel Storage Basin	At Risk
M-016-178	12/31/15	Initiate Deactivation for 105-KW Fuel Storage Basin	At Risk
M-093-28	12/31/2015	Submit Change Package for Proposed Interim Milestones for 105-KE/KW Reactor Interim Safe Storage	On Schedule
M-016-181	09/30/19	Complete Deactivation, Demolition and Removal of 105-KW Fuel Storage Basin	At Risk
M-016-186	12/31/19	Initiate Soil Remediation Under 105-KW Fuel Storage Basin	At Risk
M-093-27	12/31/19	Complete 105-KE and 105-KW Reactor Interim Safe Storage in Accordance with the RAWP	On Schedule
M-016-00C	12/31/20	Complete All Response Actions in the 100 K Area	At Risk



Project Baseline Performance

Contract to date through December 2013

RL-0012	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
Spent Nuclear Fuel Stabilization and Disposal	381.5	367.8	371.9	-13.7	-4.2	606.5	634.0	-27.5	0.96	.99
Base Total										

RL-0041	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
Nuclear Facility D&D - River Corridor	303.3	303.3	280.4	0.8	23.0	390.5	368.3	22.1	1.0	1.08
Total										

Numbers are rounded to the nearest \$0.1M



Planned Activities

Next 6 months

Sludge Treatment Project

- **Engineered Container Retrieval and Transfer System (ECRTS)**
 - *DOE approval of ECRTS Critical Decision-2/3 and Preliminary Documented Safety Analysis*
 - *Continue design to modify T Plant cells to receive Sludge Transportation and Storage Containers*
 - *Complete the Integrated Process Optimization Demonstration at MASF*
 - *Work on technical initiatives to optimize ECRTS process design, improve system safety, and reduce life cycle costs*



Planned Activities

Next 6 months (cont.)

Sludge Treatment Project (cont.)

- **KW Fuel Storage Basin Modified Annex**

Construction

- *Complete structural steel construction*
- *Mezzanine structural steel installation planned to start in early February*
- *Initiate roof installation and prepare for wall panel installation*

105KE Reactor Surveillance and Maintenance

- *Perform exterior surveillance of the reactor building*

Maintain 100K Area Minimum Safe Configuration

