

**River Corridor/Central Plateau
Tri-Party Agreement Milestone Review
Meeting Minutes
April 19, 2012**

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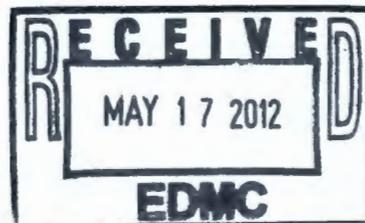
Approval: *Chris Whalen for* Date: 5/17/12
J. Hedges
 Ecology IAMIT Representative

Approval: *J.A. Dowell* Date: 5.17.12
J.A. Dowell
 DOE IAMIT Representative

Approval: *D.A. Faulk* Date: 17 May 2012
D.A. Faulk
 EPA IAMIT Representative

Minutes Prepared by: *T.W. Noland* Date: 5/17/2012
T.W. Noland
 Mission Support Alliance, LLC

Almquist, R.A.*	RL	Korenkiewicz, S.L.*	RL
Blackburn, J.E.*	WCH	Knox, K.E.*	KCR
Bohnee, G.	NPT	Lobos, R.A.	EPA
Bond, F.W.	Ecology	Louie, C.S.	RL
Brown, M.J.	Ecology	Lynch, J.J.*	ORP
Bryson, D.C.	RL	McKarns, T.C.	RL
Butler, D.H.*	MSA	Menard, N.M.*	Ecology
Cameron, C.E.*	EPA	Nguyen, T.L.	RL
Charboneau, B.L.*	RL	Niles, K.	ODE
Cimon, S.	ODE	Noland, T.W.*	MSA
Collins, M.S.*	RL	Ortiz, S.M.	RL
Cox, W.G.	CHPRC	Peschong, J.C.	RL
Dittmer, L.M.*	CHPRC	Piippo, R.E.*	MSA
Dowell, J.A.*	RL	Popielarczyk, R.S.	CHPRC
Einan, D.R.*	EPA	Price, J.B.*	Ecology
Ellison, B.A.	RL	Russell, R.W.*	ORP
Farabee, O.A.*	RL	Shoemake, J.	CHPRC
Faulk, D.A.*	EPA	Singleton, D.G.	Ecology
Foley, B. L.*	RL	Skinnarland, E.R.*	Ecology
French, M.S.*	RL	Taylor, A.R.*	RL
Gadbois, L.E.	EPA	Teimouri, A.E.	HQ
Goswami, D.	Ecology	Teynor, T.K.*	RL
Harris, S.	CTUIR	Vanni, J.	Yakama
Hedges, J.*	Ecology	Whalen, C.*	Ecology
Henry, D.	ODE	Yasek, D.M.*	WCH
Hildebrand, D.R.	RL	Administrative Record	
Jim, R.	Yakama		
Johnson, W.F.	WCH		
Kaldor, R.A.*	MSA		
Killoy, S.E.	WRPS		



*Attendees

**River Corridor/Central Plateau
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River Corridor Closure Project - Milestones M-16/M-89/M-92/M-93/M-94

Milestone Status:

M-16-55 - DOE-RL stated that the excavation for interim remedial actions (RA) for the 100-N Area will be completed this summer. Preparation and approval of the closeout sampling and the closure packages will not be completed by the 12/31/12 due date for completion of the milestone. Negotiation of new milestone dates is under way with Ecology and EPA and will be addressed in proposed Change Request M-16-12-01.

M-16-00A - The due date for this milestone is also being negotiated and addressed in the proposed Change Request M-16-12-01. DOE-RL reported that the main portions of the remediation at 100-C-7 and 100-C-7:1 have been completed. The process sampling has also been completed, and the closure sampling in C-7:1 will be done following cleanup of the remaining area. DOE-RL noted that EPA has priority for two samples in C-7 for groundwater flow testing, and discussions are under way between the contractors and EPA on the path forward for the sampling. Excavation in 118-K-1 was near completion when a tritium plume was identified going down to groundwater at trench N. A path forward is being worked to address the plume, either by remediation or with a justification in the final Record of Decision (ROD) for some type of action.

M-89-00 - DOE-RL has put out a request for interest to bidders for cleanup of the soil contamination underneath the 324 B-cell. The plan is to award the bid by the end of 2012. Ecology asked if DOE-RL has provided notification that the milestone will be missed. DOE-RL responded that Ecology is being informed in today's meeting, and a change package will be prepared to formally submit notification to Ecology in July 2012. DOE-RL noted that milestone M-89-00 is being reviewed in association with D4 in the 300 Area and what milestones need to be changed.

Significant Accomplishments - For Last 3 Months:

M-16 - Remedial Action/Risk Assessment - DOE-RL stated that all the work that can be done at C-7:1 has been completed, and MSA is in the process of moving the power lines. WCH is planning to restart remediation on the sidewall at C-7:1 at the beginning of FY 2013, and that work is expected to take a few months to complete. The chrome plume excavation at 100-F-57 was completed, and process sampling showed that all of the chrome was removed. The final closure plan is being developed, with plans to backfill and close out 57 by the end of FY12. DOE-RL reported that work at 618-10 has been a slow process, but the pace is picking up. There

is a lot of different work under way, including the bottle processing and loadout of the drums. Process improvements have been implemented in an effort to improve production, which will be applied at 618-11.

M-94 - DOE-RL noted that a couple of test pits were done below the basement floor of 327, and no contamination was found.

ERDF - EPA noted that the August 2012 date for issuance of the draft Performance Assessment (PA) seemed to be a little early. DOE-RL concurred, and will check on the date.

Significant Actions Planned - For Next Six Months:

M-16 - Remedial Action/Risk Assessment - Preparations are under way for removal of the 309 test reactor. Six-inch holes are being drilled through the annular shielding area in an effort to get underneath and be able to lift it out. The shielding area consists of a grout or cement mixture and rebar, and the drilling progress has been slow. Experts have been brought in to assist with the drilling. DOE-RL indicated that completion of removal of the 309 test reactor is more in the six-month time frame.

Performance Summary:

DOE-RL reported that in general the projects continue under cost and ahead of schedule. An improvement in cost performance (higher CPI) is expected in the next quarter with credit being given for the completion of several waste sites. All of the American Recovery and Reinvestment Act (ARRA) work was completed with the exception of one buy-back project with the remaining ARRA funding. ARRA funds will be used by June 2012 for the 618-10 remediation. The ARRA funding freed up about 30 million dollars to be applied to additional base work activities.

Issues:

DOE-RL noted the issues regarding 100-N Area remediation delays and 100-C-7:1 /100-D-30 remediation delays are being addressed with a change request for new completion dates. Regarding the 116-H-5, 128-H-1, and 126-H-2 waste site closure documents disputes, agreement has been reached with Ecology on the closure documents for 116-H-5 and 128-H-1. For 126-H-2, DOE-RL is developing a sampling plan for underneath the clear well. Ecology expressed appreciation to all parties for their willingness to resolve the issues without elevating the dispute process. Ecology inquired about the last issue regarding possible differences in remedial action goals for interim RODs versus final RODs. DOE-RL responded that as cleanup work continues, and preliminary remediation goals (PRGs) are encountered that may be lower than the current cleanup levels, an evaluation is being done about whether or not remediation should be deferred. DOE-RL noted that deferred remediation would obviously change contractual requirements. DOE-RL stated that if there is an outlier that would present a problem in the final ROD, an evaluation will be done with input from Ecology and EPA on whether or not further remediation would be needed in that area. One specific area that is being discussed with EPA is in the 300

Area where there is uranium contamination, which posed an ecological risk. A review of the final PRGs is being done for the top 15 feet in that area.

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

Accomplishments - 2nd Quarter:

TPA Milestone M-016-171 was completed, meeting the March 31, 2012 due date for a deliverable to EPA. One piece of the deliverable was the proposal of two interim milestones, one at the end of August 2013 and another in 2014, which will lead towards the 2015 milestone for technology development. The intent is to have enough information by 2015 to set new milestones for the critical decision process.

D4 - DOE-RL provided two color photos depicting a rotor from a cooling pump. There were asbestos sheathed windings in the pump motors, and some of the windings had frayed and fell onto the truck bed. Sampling was conducted, and the results showed the powder was not asbestos. One asbestos fiber was found, and proper precautions were taken. The rotors were taken off the trucks, wrapped, and then the proper precautions were taken before moving them to ERDF for disposal. The airborne sampling results showed no contamination above the standards. A foot of soil was removed where the rotors were staged. DOE-RL stated that it was verified the area is clean, and the steps taken were more precautionary. DOE-RL reported that demolition of the 183.2 KE sedimentation basin continues with cleanout of the river sediment. Some river sediment sample results were high for lead and mercury, which is mainly due to the mines upstream, but it is all close to being removed. Demolition of the 182K pump structure is nearing completion. The pump was used to transfer water between K East and K West. The structure is about 35 feet deep, and there is a waste site underneath (diesel oil crib) that will be removed.

KE Reactor Interim Safe Storage - The conceptual design report was 100 percent complete as of yesterday (4/18/12). The architect/engineer is in the process of releasing the drawings. DOE-RL reported that the milestone due date for the full enclosure of the reactor is July 31, 2014, and it is on schedule to be completed by May 2014.

Waste Sites - DOE-RL reported that a memorandum of agreement (MOA) was reached with the tribes, allowing the backfill and interim revegetation on 100-K-63 to be completed. The MOA was recently signed to take out the outfall structure and the effluent pipelines in 100-K-64. The work is anticipated to start by early summer 2012.

Sludge Treatment Project (STP) - Removal of KOP Material (M-016-172) - DOE-RL reported that work on processing the first knockout pot (KOP) material is planned to start by late May, early June 2012, and to be completed by the milestone due date of 9/30/12. DOE-RL stated that the KOP material will be processed in the same manner as the spent fuel. The material will be transferred to the canister storage building (CSB) and then to a future long-term repository. When the Waste Isolation Pilot Plant (WIPP) went through its program recertification in

FY2008, it was determined that KOP sludge was no longer an acceptable waste stream.

STP Phase 1 Removal of Containerized Sludge (M-016-174) - DOE-RL reported that the sample analysis was completed for engineered container 230, which is where the settler tube sludge was placed. The settler tube sludge will be the bounding case for the other two waste streams, which are less challenging. The settler tube sludge will be sent to WIPP. DOE-RL noted that construction of the substructure for the annex has been initiated. Ecology asked about the purpose of the annex. DOE-RL responded that the annex will function as a transfer bay. The sludge transport storage canister (STSC) will be set on a trailer bed and then placed in the annex. Hoses will be hooked to the top of the STSC, and the sludge material will be transferred directly into the canister. No personnel will be located inside the annex. Ecology asked if the annex serves as containment. DOE-RL stated that the purpose is confinement, and containment is provided by the hose-in-hose transfer lines. The annex is designed as a category 2 facility.

Milestone Status:

All of the milestones listed through 2020 are on schedule.

Project Baseline Performance:

DOE-RL reported that RL-41 is slightly behind schedule and over budget. The cost variance is mainly due to the inability to start work in the 100-K-64 flood plain. The delay is primarily due to the inability to resolve Tribe concerns with this work. If an MOA is reached with the Tribes by June 2012, the work can be performed by the end of FY12. RL-12 is on schedule and budget.

Planned Activities Next Six Months:

DOE-RL noted that under D4 scope of work, demobilization of the 190KW pump house has been completed. DOE-RL pointed out that the map on page 13 of today's handout is broken out into zones, which was done to simplify the reporting process since there are numerous waste sites. DOE-RL stated that it believes Area AG has been remediated as far as possible. A review is being done regarding the extent of the cap needed to prevent intrusion of water, and then additional sampling would be conducted. DOE-RL noted that the way the waste sites are located, full remediation cannot be done until the reactor building is gone. DOE-RL is working with EPA to demonstrate protectiveness, and it considers Area AG to be a high priority. DOE-RL noted that it went back into Area AH because the stack removal freed up more of the waste site area, and remediation has been done as much as possible going east to west.

DOE-RL reported that a discussion was held with EPA yesterday, and a proposal was made to EPA to move forward with the characterization of the deep vadose zone. The data needed to justify the cap and also protectiveness measures will be gathered. DOE-RL stated that the data won't be available in time for the ROD, but it will allow the data to feed back into the ROD and possibly change the method for protectiveness, such as adding an apatite barrier or more downgradient wells for monitoring and extraction. DOE-RL noted that groundwater, soil and D4

personnel have been involved in the process.

Ecology asked about the scope for improvements at T Plant. DOE-RL responded that the funding for the modifications at T Plant will be through RL-12. The modifications are tentatively planned for FY13, pending funding availability. DOE-RL reported on the final fuel that was sent to the Cold Vacuum Drying Facility (CVDF) in a multiple canister overpack (MCO). There is an issue with determining dryness of the fuel, which is done through a rebound test. The fuel was dried and passed the first rebound test. The second rebound test didn't quite reach the .25 delta between the first and second readings within three hours, and it took four hours. DOE-RL noted that the fuel is dry and is in a safe configuration, but the interstitial voids between the finer scrap material may have retained some residual water. The situation is under review, and a recovery plan will be developed and the fuel will undergo more drying. DOE-RL has kept EPA apprised of the situation.

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

DOE-RL reported that milestone M-035-09H was completed. The Ecology and EPA data access mechanisms were updated with Virtual Desktop Interface (VDI). Two machines at the Ecology office were updated with new machines. No issues have been reported to date with the new access mechanism. The next quarterly review will be just before the next milestone due date, which is in about two years.

Lifecycle Report - M-036-01

DOE-RL provided an update on the lifecycle report. The public comment period for the 2012 lifecycle report closed on April 13, 2012, and comments have been received. DOE-RL indicated no issues with meeting the January 31, 2013 milestone due date for the 2013 lifecycle report.

PFPP Closure Project - TPA Milestone M-083

Quarterly Milestone Summary:

DOE-RL stated that the three remaining milestones are on schedule.

Accomplishments - 2nd Quarter:

DOE-RL reported that as of today, all of the vault facilities have been demolished and the rubble has been removed. A small amount of cleanup remains, and then the work will be completed. DOE-RL pointed out on the photos the congested work areas where the process piping and transfer lines and asbestos insulation from piping are being dispositioned. During staging for asbestos removal, a cover plate on a deck head exhaust was tapped, causing material to puff out of the deck head. A full breathing requirement was implemented until the cause is investigated. DOE-RL noted that the standard large box 2 (SLB2) used for loadout of waste from the PRF facility has about four times the capacity than the storage boxes that were used for transferring

transuranic waste from PFP. The larger capacity significantly reduces the size-reduction of all the waste that goes in the SLB2, which is a major improvement for the project.

DOE-RL reported that five key performance goals were identified for this year. Three goals have been met with the pencil tank size-reduction, cleanup of the lab area, and completion of the vault facilities. The two remaining goals are completion of the gloveboxes in Rooms 230A/B and 235B and develop a PFP capital project strategy.

DOE-RL reported that a three-day value engineering (VE) study was conducted, which resulted in four areas of focus. The first area of focus is hands-on tool efficiency and effectiveness, and a team is working on ways to mitigate risks and down time. The second area of focus is size-reduction challenges and transporting the equipment effectively (i.e. SLB2s). The third area focused on reducing the number of cuts in size-reducing equipment. The fourth area is focused on the concept of size-reduction in other facilities, such as CWC.

Project Baseline Performance:

DOE-RL reported that there is a slight negative cost and schedule variance since the start of FY09. DOE-RL noted that there may be future cuts in personnel due to funding issues, which would impact the teams at PFP. DOE-RL added that there is very little float in the cost or schedule performance, and an effort is being made to establish the balance of the teams with the budgetary challenges and still meet the milestones.

TPA Milestone M-26-01 - Land Disposal Restrictions Report

DOE-RL reported that the annual LDR report was issued on April 9, 2012. The LDR report is a summary report this year. Ecology noted that the main focus of review on the LDR report will be some of the facilities that don't have schedules.

TPA Quarterly Milestone Review M-91 Series

DOE-RL provided a brief summary of the M-91 milestones. There is minimal activity, due to cuts in funding for retrieval, treatment or shipment of waste. DOE-RL noted that the target milestones for M-91-40 and M-91-41, which are unenforceable milestones, will not be met. Ecology expressed concern regarding DOE-RL's ability to meet the full milestones since no waste has been retrieved under the target milestones. Ecology added that the target milestones were jointly established to keep the full milestones on track. Ecology is considering sending DOE-RL a letter stating its concern about the target milestones.

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

Accomplishments - 2nd Quarter:

DOE-RL explained that 6 to 12 inches of gravel were spread following removal of buildings and

equipment from 284E, 284W, 272E, 209E and the Industrial 7 area. The 209E demolition is complete, and DOE-RL stated that according to the Waste Identification Data System (WIDS) there are about 13 waste sites in the area. When the 209E zone is closed, cleanup will be done on those waste sites. DOE-RL noted that all of the sites that were identified as asbestos areas of concern were taken on as additional work outside the work package that was already completed. DOE-RL responded to employee concerns, and conservative measures were taken with added precautions to ensure the work areas were thoroughly scrubbed of asbestos. There were no samples that yielded significant results. The standard is about 10,000 fibers of asbestos to cause a significant effect on the body, and there were two fibers found in a couple of samples. DOE-RL noted that the goal is to remove all the old piping instead of just removing the asbestos and leaving the piping.

Ecology asked if there were any waste sites underneath the areas that were covered with gravel. DOE-RL indicated that there are several waste sites. Ecology asked what system would be in place to flag the potential asbestos areas when cleanup work is conducted in the future. CHPRC explained that when the sites are entered into WIDS, a correlation will be made to the waste sites located underneath. In the future, when anyone is looking at the sites in WIDS, that correlation will trigger a review of the actions taken and that asbestos concerns were addressed. Those sites have now been entered into the WIDS system and are being evaluated in accordance with MP-14.

Project Baseline Performance:

DOE-RL reported that there was an \$18.6 million positive cost variance, which was contributed to the PFP project.

Milestone Status:

DOE-RL reported that all of the TPA milestones are on schedule. Ecology requested that DOE-RL provide a negotiation schedule for milestone M-085-01.

Soil and Groundwater Remediation Project Milestone Review - M-015-00, M-016-00, M-024-00, M-037-00, M-085-00

Accomplishments - 2nd Quarter:

200 West Area Groundwater Treatment Facility - DOE-RL reported that startup of the 200 West pump and treat facility is in process. The readiness assessment is under way to validate personnel, procedures and equipment are ready for startup, and final checks on equipment are being done. DOE-RL noted that a pump and treat facility is not required by DOE orders to undergo the rigorous standards that a nuclear facility would be held to for startup. However, the same approach for startup of a nuclear facility was applied to the 200 West pump and treat, with the exception of specific items that don't apply, such as a nuclear safety assessment. A hazard assessment is included as part of the startup.

Ecology asked when the contaminated water will be run through the system versus the simulant that is being run now. DOE-RL responded that a hazardous waste certification is required to handle contaminated water, and the majority of the workers currently on site are construction workers who do not hold that certification. DOE-RL estimated that the contaminated water will start running in July 2012. The cutoff is in June 2012 to have the system ready for turnover to operations. DOE-RL stated that the goal is to be running at 2,000 gallons per minute by the end of FY12, which exceeds the requirement in the ROD. DOE-RL noted that the new resin being used in DX has been running since December 2010 and has not needed to be changed out. Normally the resin has to be changed out every eight weeks. The resin costs more, but it will provide many advantages, including reduction in labor costs and exposure to chemicals.

200-UP-1 - DOE-RL reported on a cost efficiency associated with the installation of well racks. Every well used to have a permanent well pump control station that was connected to the treatment building with hard conduit. The pump control stations are now set on a concrete pad and can be picked up and moved with a forklift. The hard conduit has been replaced by a super heavy gauge electrical system and can be dragged to a new station.

Soil and Groundwater Treatment Progress FY2012 - DOE-RL reported that the goal to remove 400 kgs of carbon tetrachloride will be exceeded. The 200-ZP-1 unit, which is the primary treatment facility, has been shut down to make final connections. Ecology and EPA requested a closeout report from DOE-RL to document that the system was closed and the amount of material that was processed through the facility. DOE-RL noted that the 100-D pump and treat has removed more hexavalent chromium than was removed during the interim actions in the first ten years of operation.

Milestone Summary:

DOE-RL stated that completion of the RI/FS's has been a challenge, and three target dates have been missed and one is behind schedule. DOE-RL noted that the project is on schedule to meet M-015-00D. DOE-RL acknowledged that the quality standard for the RI/FS's needs to be addressed, and when 4,000 pages of appendices are being produced there will be some problems. EPA questioned why 4,000 pages of appendices are being produced, and suggested that DOE-RL consider whether all that information is needed to support its decision-making process. DOE-RL responded that it's more the 1,000-page RI/FS that poses a problem.

EPA stated that it does not believe DOE-RL is on track to complete the UP-1 proposed plan (PP), noting that no one is currently working on the PP. DOE-RL responded that the UP-1 PP is being addressed with senior management. EPA indicated that the schedule DOE-RL provided for UP-1 is not recoverable, and that EPA was only given a week for legal review. DOE-RL acknowledged the issue with UP-1. Ecology stated that the PP's are 80-page documents, and the quality of the documents has been poor. Ecology added that the 4,000 pages of appendices is not the issue. There was some discussion regarding the path UP-1 PP has taken, and it was noted that it was started two years ago and considered one of the easier documents to complete and approve.

Project Baseline Performance:

DOE-RL stated the funding shortfall for the project, and that actions are being taken to mitigate the shortfall. DOE-RL noted that, for example, the aquifer test at BP-5 is on the cusp for funding. The equipment is done, but the system will not be turned on this fiscal year. The cost estimate for running the system is being reviewed. DOE-RL also noted that the work scope that was deferred from this year to next year will have to be finished next year and that work was not planned for. DOE-RL will schedule a meeting with Ecology and EPA in May 2012 to conduct a review and discussion of groundwater, the 2015 vision, and to get input on project priorities. Ecology expressed concern regarding the potential delay with BP-5, noting that during the original prioritization, Ecology agreed to push the RI/FS back while EPA was not in favor of doing that. Agreement was reached to delay the RI/FS as long as the aquifer testing moved forward. DOE-RL responded that those concerns will be discussed during the May meeting with Ecology and EPA. EPA pointed out the issue with the RI/FS documents having to be redone due to poor quality is money that could be directed towards other projects, such as the BP-5 pump test.

Planned Activities Next 6 Months:

200-ZP-1/200-PW-1 SVE - DOE-RL stated that the initial startup for the 200 West pump and treat was evaluated at 1,000 gallons per minute. In order to reach the goal of about 2,000 gallons per minute, there needs to be enough injection and extraction capacity. Wells will be added through next year to ensure adequate capacity.

200-UP-1 - EPA asked for confirmation that the UP-1 ROD will be delivered within the next six months. DOE-RL responded that it will be delivered.

Deep Vadose Zone - Ecology reported that ORP transmitted a draft change package for vadose zone work. An agreement was reached to exchange the interim barrier work for the vadose zone characterization and testing. DOE-RL stated that instead of an interim barrier, the pour water extraction will be conducted. During initial desiccation testing, it was concluded that the water was being treated through particle migration, not evaporation. The particles were cascading across the soil and water droplets were collecting in the well. The significance of that result is that water vapor contains no technetium 99, but the water droplets do contain tech 99. Once the water is evaporated, even if it contains tech 99, the tech 99 doesn't evaporate. DOE-RL is working with tank farms to set up an extraction point within tank farms and then pipe it to outside the tank farm fence line. The PRC equipment would potentially be located at that point and could operate the water extraction in a more cost-effective manner.

Seismic Study - EPA inquired about the current seismic study that was reported in the Tri-City Herald newspaper, and expressed concern that funding for the study would come out of the cleanup budget. DOE-RL responded that a National Phenomenon Hazard Analysis (NPHA) is required every ten years by DOE order. There is a subcategory of the NPHA for seismic analysis

(PSHA), and the cost is estimated at about eight million dollars for a two-year seismic study. DOE-RL indicated that the cost would be split 50/50 with ORP. DOE-RL stated that the last study was due in 2008, so the study is four years overdue. The study is designed to update the safety basis for the Hanford Site. EPA asked what would be done differently if there was a new finding in the seismic study. DOE-RL responded that if a new Class 2 or 3 facility were to be built, it would be built based on the new seismic analysis. DOE-RL noted that it had considered getting away from the NPHA requirement, but due to the seismic interest at the Waste Treatment Plant (WTP), the decision was made to continue with the NPHA. DOE-RL stated it has received guidance from the DOE secretary that delegates local authority to challenge nonsafety-related requirements. That authority allows the DOE-RL manager to achieve efficiency if a requirement doesn't make sense to implement. DOE-RL is currently conducting a review of all nonsafety requirements, and will present a briefing to Ecology and EPA on its findings at a later time.



Tri-Party Agreement

Thursday, April 19, 2012

Ecology Offices, Conference Room 3A/B

3100 Port of Benton Blvd

Richland, Washington

Agenda

River Corridor/Central Plateau Milestone Review Meeting

Chairperson: Dennis Faulk

Time	Milestones	Subject	DOE Presenter
8:30 a.m.	M-16, 89, 93 and 94	River Corridor Closure	Mark French
8:55 a.m.	M-16 and 93	100 K Remediation	Tom Teynor
9:15 a.m.	M-35	Biennial Assessment of Information and Data Access Needs	Anthony Taylor
9:20 a.m.	M-36	Life Cycle Report	Stephen Korenkiewicz
9:25 a.m.	M-83	PFP Transition	Larry Romine
9:35 a.m.	M-26	Land Disposal Restrictions Report	Mike Collins
9:40 a.m.	M-91	Acquisition of Facilities to TSD TRU/TRUM and LLMW	Mike Collins
9:45 a.m.	M-16 and 85	Central Plateau Remediation	Al Farabee
9:55 a.m.	M-15, 16, 24, 37 and 85	Soil and Groundwater Remediation	Briant Charboneau
10:20 a.m.	Adjourn Milestone Review		

RIVER CORRIDOR CLOSURE PROJECT

DOE's Largest Environmental Cleanup Closure Project

TPA Quarterly Review

For Period: January - March 2012



Tri-Party Agreement

River Corridor Milestones:

M-16

M-89

M-92

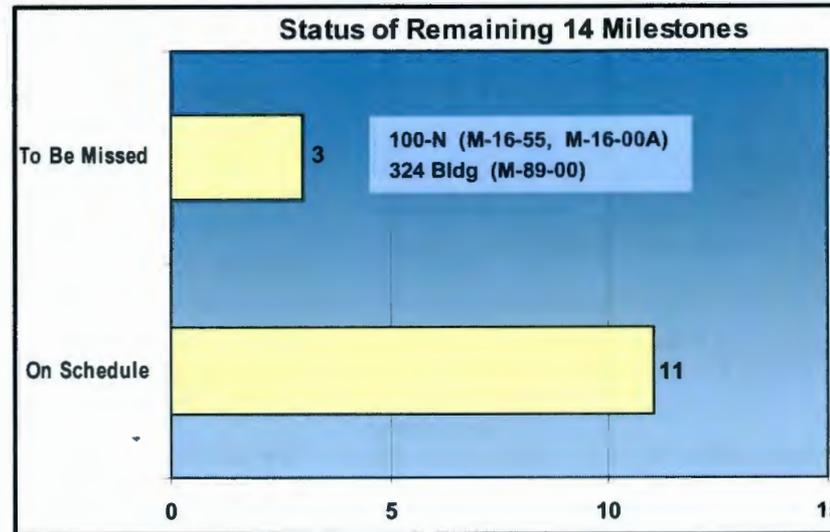
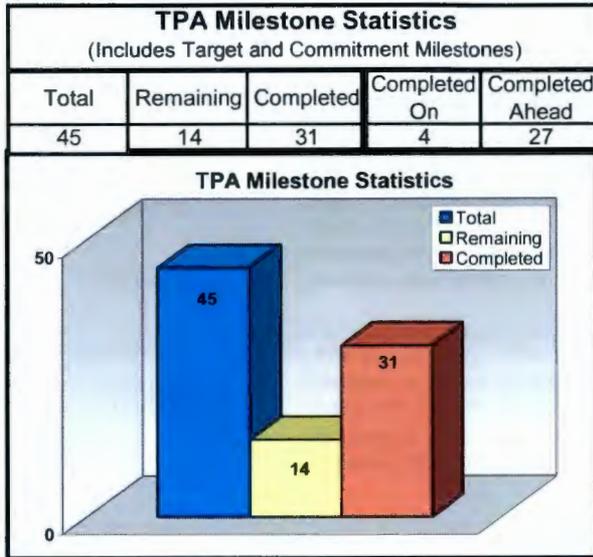
M-93

M-94

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

April 19, 2012

Protecting the Columbia River



Quarterly Summary (January - March 2012)

- Completed TPA Milestone:**

- M-16-56 – Complete Interim Remedial Actions for 100-IU-2/6 Waste Sites Listed in 1999 100 Area Remaining Sites ROD (32 sites) as Described in RDR/RAWP (due 2/28/12) - 2/6/12

- Proposed Change Request:**

- M-16-12-01 is being drafted to add new milestones to track continued progress of 100 Area interim remedial actions. The change will also propose new completion dates for site/facility closures that are forecasted to extend beyond the December 31, 2012 milestones (M-16-00A and M-16-55).

TPA MS No.	Compliance Date	Title	Status	Comments
M-16 Milestones - Remedial Action (milestones through 12/31/2013)				
M-16-56	02/28/12	Complete Interim RA for 100-IU-2 / 100-IU-6 Waste Sites Listed in 1999 100 Area Remaining Sites ROD (32 sites) as Described in RDR/RAWP	Completed	Milestone completed 2/6/12.
M-16-74	09/30/12	Complete Interim Remediation (to include excavation, loadout, closeout sampling, backfill) for all 300 Area "Inside the Fence" Waste Sites North of Apple Street, Except that the 300-268 and 300-123 Waste Sites Remediation Need Only Be Completed Through Excavation and Loadout	On schedule	Waste sites 300-4, 300-15, 300 RRLWS, 300-265, 300-257, 300-214, and 300 RLWS are impacted by 300 Area building retentions and are addressed in M-16-00B. Revegetation of M-16-74 waste sites will be completed under M-16-139.
M-16-55	12/31/12	Complete Interim RA for 100-N Area	To be missed	Interference between waste site remediation, facility demolition, and interim safe storage has impeded project schedules. As a result, verification and closure documentation will not be completed for all of the waste sites and facilities in time to meet the 12/31/12 milestone.
M-16-145	12/31/12	Complete Interim RA for 100-K Area Facilities and Waste Sites not Included as Phase 1,2, or 3 Work	On schedule	Sites in this milestone are those listed in IROD prior to August 2009.
M-16-00A	12/31/12	Complete All Interim RA for 100 Area Units, with Exception of 100-K Area, by Specified Due Date as Approved in a RDR/RAWP	To be missed	To be missed due to M-16-55, and as a result of encountering unanticipated soil contamination at 100-C-7 and 100-D-30.
M-16-139	03/31/13	Complete Revegetation of 300-FF-2 Waste Sites Governed by M-16-62, M-16-64, M-16-74	On schedule	
M-16-75	09/30/13	Initiate Substantial and Continuous Remediation on 309 Facility Dedicated Radioactive Liquid Waste Sewer (300 RLWS) and 300 Area Process Sewer (300-15) Systems	On schedule	PNNL building retentions and utilities require potential modification/discussions of 300 Area outyear milestones due to changed conditions.

RIVER CORRIDOR CLOSURE PROJECT

For Period: January – March 2012

TPA MS No.	Compliance Date	Title	Status	Comments
M-89 Milestone - 324 Bldg Non-Permitted MW Units Closure				
M-89-00	09/30/12	Complete Closure of Non-Permitted Mixed Waste Units in 324 Bldg REC B-Cell, REC D-Cell, and High Level Vault	To Be Missed	Soil contamination encountered under 324 B-Cell. This is a differing condition and will result in cost and schedule impacts. Change package will be submitted after new demolition strategy has been developed.
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	
M-93 Milestone - Reactors Final Disposition				
M-93-20	09/30/12	Complete 105N Reactor ISS	On schedule	
M-94 Milestones - 300 Area Surplus Facilities Disposition				
M-94-08	06/30/12	Complete Removal and/or RA for 11 of Following Facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, 327, 333, 340, 340B, 3706, and 3720	On schedule	
M-94-09	09/30/13	Complete Removal and/or RA for 13 of Following Facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, 326, 327, 329, 333, 340, 340B, 3706, and 3720; to include 323 Facility	On schedule	

Significant Accomplishments – For Last 3 Months:

M-16 – Remedial Action / Risk Assessment:

- Completed verification sampling at 100-C-7; continued excavation at 100-C-7:1.
- Processed NaK pieces and closed NaK staging area at 100-D Area.
- Completed backfill/revegetation of available 100-F Area sites; continued plume excavation at 100-F-57.
- Started 618-10 loadout of contaminated soil to ERDF; started “in trench” bottle processing.
- Awarded 618-11 Burial Ground infrastructure subcontract.
- Received approval of 18 waste site closure documents during this reporting period.
- Issued River Corridor Baseline Risk Assessment (RCBRA), Vol. 1, Ecological Risk Assessment, Rev. 0.
- Received WCH input for Segment 3 long-term stewardship transition and turnover package.

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

- Continued RFP preparation for remediation subcontract.

M-93 – Reactors Final Disposition:

- Awarded contract for remaining 105N/109N safe storage enclosure (SSE) workscope.
- Continued below-grade loadout of 105N Fuel Storage Basin.

M-94 – 300 Area Surplus Facilities Disposition:

- Completed 309 Plutonium Recycle Test Reactor above-grade demolition.
- Completed below-grade demolition of following facilities:
 - 320 Physical Sciences Laboratory
 - 340A Waste Retention Building
 - 3706A Air Conditioning Equipment Building
 - 3707F Radiation Monitoring, Personnel Survey Building
- Continued 327 Phase II below-grade demolition/loadout.



Remediation of 116-N-2



Demolition of 308 Fuels Development Laboratory

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

ERDF

- For period January-March, disposed ~ 508,000 tons of waste; bringing total to ~ 7,254,600 tons disposed since WCH assumed River Corridor cleanup responsibilities 8/27/05.
- Coordinating ERDF performance assessment (PA) with Tank Closure and Waste Management Environmental Impact Statement. Estimating draft PA to be issued in August 2012.



Truck-and-Pup Disposal Operations in ERDF Super Cells 9 and 10

Significant Actions Planned – For Next 3 Months:

M-16 – Remedial Action / Risk Assessment:

- Complete loadout of stockpiled 100-F-57 material; demobilize 100-F trailers.
- Complete remediation of 37 100-IU-2/6 subsites; begin remediation of 26 additional subsites after receiving cultural clearance.
- Complete 100-N Area Phase II in-situ bioremediation design.
- Perform 300 Area confirmatory sampling.
- Draft waste profiles for 618-10 vertical pipe units.
- Issue Rev. 0 ecological risk assessment report for Hanford Site releases to the Columbia River.
- Issue Rev. 0 of Segment 3 interim remedial action report.

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

- Issue RFP for remediation of 300-296 waste site under B-Cell.

M-93 – Reactors Final Disposition:

- Complete loadout of 105N Fuel Storage Basin.
- Complete remaining 105N/109N SSE workscope.

M-94 – 300 Area Surplus Facilities Disposition:

- Complete 327 Phase II below-grade demolition/loadout.
- Complete below-grade demolition/loadout of 308 Fuels Development Laboratory and 307 Retention Basin.
- Complete removal of 309 test reactor.
- Complete above-grade demolition/loadout of 310 (TEDF).

ERDF

- Begin transportation and disposal of 618-10 concrete-lined drums.

PERFORMANCE SUMMARY (includes ARRA)
Contract Inception (8/27/05) through March 2012
 (\$K)

	IPB		CUMULATIVE			Previous Quarter Comparison			
	BAC	EAC	BCWS	BCWP	ACWP	SCHEDULE VAR (\$)		COST VAR (\$)	
						Dec	Mar	Dec	Mar
D4	559,827	526,275	423,024	468,509	386,518	55,792	45,485	89,372	81,991
Reactor ISS	88,191	90,041	80,305	74,111	74,727	-3,204	-6,195	1,296	-616
Field Remediation	686,779	778,272	548,263	538,818	493,928	-15,000	-9,444	26,000	44,891
Waste Operations	535,365	437,888	342,901	450,278	344,270	102,490	107,377	92,132	106,008
ESFC	71,862	63,296	62,292	61,152	52,365	-1,202	-1,140	8,855	8,787
Mission/General Support	324,167	339,189	288,179	288,179	252,301	0	0	25,559	35,878
Transition	3,979	3,747	3,979	3,979	3,747	0	0	232	232
Contingency	63,783	63,783							
TARGET COST TOTAL	2,333,953	2,302,491	1,748,944	1,885,026	1,607,855	138,876	136,082	243,446	277,171

Schedule Variance (PMB): \$136,082K

- Acceleration of 300 Area and 100-N Area building demolitions.
- Remediation delays at 100-D, 100-N, and remaining waste sites around 309 building. Partially offset by accelerated work at 100-B/C.
- Earned value method for waste treatment changed via change control in April 2011 from percentage actual tons treated to apportioned effort of actual tons disposed (also applies to cost variance).
- ERDF transportation, treatment, and disposal support to accelerated work in FR and D4 Projects.

Cost Variance (PMB): \$277,171K

- Significant underruns experienced in 300 Area building characterization, deactivation, and demolition activities.
- 100-D, 100-F, and 100-IU-2/6 remediation underruns. Partially offset by project support costs at all active dig sites, particularly in the 300 Area.
- Costs have been less than planned due to Waste Operations efficiencies achieved in waste treatment, transportation, and construction. These efficiencies and increased waste volumes have more than offset cost overruns in direct project support.

ARRA - Performance Summary
 April 2009 through March 2012
 (\$K)

	IPB		CUMULATIVE			Previous Quarter Comparison			
	BAC	EAC	BCWS	BCWP	ACWP	SCHEDULE VAR (\$)		COST VAR (\$)	
						Dec	Mar	Dec	Mar
RL0041.R1.2 - Cell 9 / ERDF	51,361	44,429	51,361	51,361	44,429	0	0	6,902	6,932
RL0041.R1.3 - Acc Rem / ERDF	59,737	43,907	59,737	59,737	43,829	0	0	15,784	15,908
RL0041.R1.4 - Cell 10	37,672	26,803	37,672	37,672	26,803	0	0	10,866	10,869
RL0041.R1.5 - Waste Ops	31,690	28,116	31,690	31,690	28,116	514	0	3,168	3,574
RL0041.R2 - 618-10	62,988	51,878	62,988	62,988	51,878	0	0	10,880	11,110
RL0041.R3 - 618-10 Buyback	16,997	18,597	15,755	10,158	14,446	-3,686	-5,597	-798	-4,288
Contingency	1,018	1,018							
TARGET COST TOTAL	261,463	214,748	259,203	253,606	209,501	-3,173	-5,598	46,802	44,105

Schedule Variance (PMB): (\$5,598K)

- 618-10 excavation delayed due to industrial hygiene and respiratory program issues, and delays in processing bottles and drums.

Cost Variance (PMB): \$44,105K

- ERDF Cells 9/10 construction and ERDF operations realized efficiencies.
- ERDF equipment and facility upgrade costs less than budgeted.
- Field Remediation project support requirements less than planned.
- Fewer comments received and streamlining the confirmatory sampling process (e.g., use of fewer sub-sites than originally planned) resulted in significantly lower analytical costs.
- Fewer 618-10 anomaly samples processed and cost of in-process samples less than estimated, less support used to-date for neutron detector than planned, one drum punch was fabricated instead of two, and well installation and overall infrastructure upgrades were under budget.
- 618-10 costs greater than planned due to two-month stand-down.

RCC Issues

100 Area

- **Issue:** Interferences among 100-N Area waste site remediation, facility demolition, and interim safe storage have impeded completion of remediation activities. As a result, verification sampling and closure documentation for 100-N Area waste sites and facilities will not be accomplished in time to meet the M-16-55 milestone.
Status: A draft change request has been developed to propose new completion dates for these sites and facilities.
- **Issue:** As a result of encountering unanticipated soil contamination at 100-C-7:1 and 100-D-30, waste site remediation will not be completed in time to meet the M-16-00A milestone.
Status: A draft change request has been developed to propose new completion dates for the sites.
- **Issue:** DOE initiated dispute on February 10, 2012 based on Ecology's rejection of the 116-H-5, 128-H-1, and 126-H-2 waste site closure documents.
Status: DOE and Ecology have reached tentative agreement on 116-H-5 and 128-H-1; and a path forward for 126-H-2 continues to be discussed by the parties. The dispute has been extended to May 11, 2012.

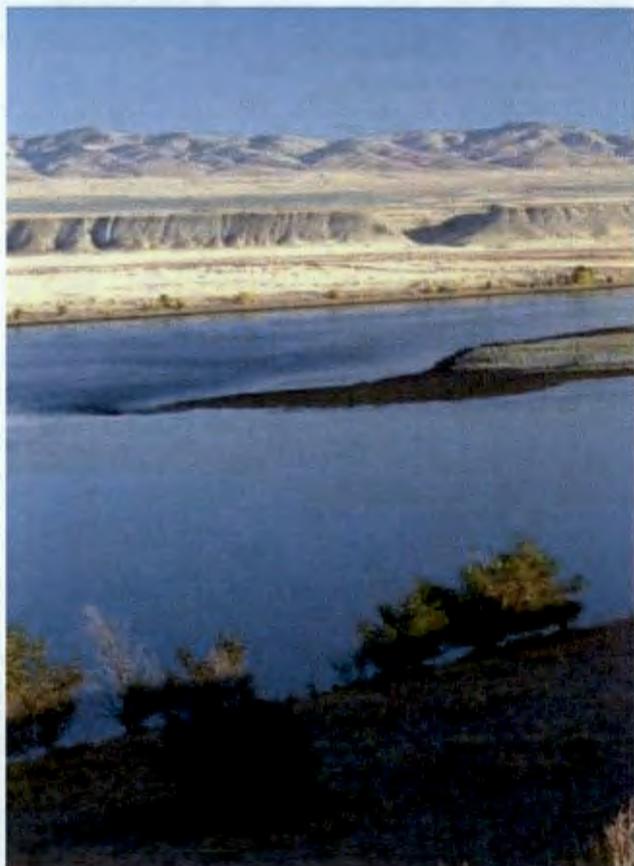
RCC Issues

300 Area

- **Issue:** The radiological contamination encountered under the 324 facility will affect the schedule for demolition of the 324 complex and completion of the M-89-00 milestone.
Status: A new remediation/demolition strategy is under development. Proposed changes to the M-89-00 milestone will reflect the new strategies.

New RODs

- **Issue:** Transitioning remediation from interim action records of decision to the new records of decision may result in differences in remedial action goals.
Status: DOE is developing a recommendation to address potential changes in cleanup standards; which will be presented to the regulatory agencies for discussion.



100-K Remediation

TPA Milestones: M-016 and M-093

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

Second Quarter FY2012
April 19, 2012



Accomplishments – 2nd Quarter 2012

Completed TPA Milestones:

- **M-016-171:** *Complete K Basin Sludge Treatment and Packaging Technology Evaluation Report and Submit a Schedule including proposed new interim milestones for bench scale or identified testing in order to meet M-016-73.*
 - Submitted to EPA a Sludge Treatment and Technology Evaluation Report and proposed new interim milestones to satisfy M-016-171.
 - Selected warm water oxidation as the technical baseline for sludge treatment.
 - Identified size reduction and Fenton's Reagent processes as potential enhancements to reduce processing time and schedule.



Accomplishments – 2nd Quarter 2012

D4

- Continued 105-KE Interim Safe Storage (ISS) activities
- Continued demolition of the 183.2KE Sedimentation Basin
- Started demolition of the 182K structure
- Started demolition preparation activities for the 183.7 Pipe Tunnel
- Completed demobilization of the 190KW Project



Accomplishments – 2nd Quarter 2012



KE Reactor Interim Safe Storage

- Released Conceptual Design Report, conducted the 90% design review, approved final design, and drafted the Final Design Report
- Completed 80% of the repair to the above grade reactor building openings
- Implemented BCR to reflect revised work plan and upgrade cost estimate based on 90% design

Accomplishments – 2nd Quarter 2012

Waste Sites

- Completed Area AA Verification Sampling Instructions for Zones 1 and 2
- Initiated excavation of 100-K-3 and 100-K-68 through 71



Accomplishments – 2nd Quarter 2012

Waste Sites (con't)

- Completed the interim re-vegetation of 100-K-63
- Draft RSVP for 100-K-63 in process
- Completed remediation of pipelines in the 100-K-102 waste site
 - 1,574 tons of soil/piping removed



100-K-63 re-vegetation completed



Accomplishments – 2nd Quarter 2012

Sludge Treatment Project – Removal of KOP Material (M-016-172)

- **Knockout Pot (KOP) Material Processing System**
 - Completed readiness activities in support of removing the last of the “found fuel” and burial ground fuel from the 105KW Basin.
 - Started the installation of the KOP material processing system (KPS) in the 105KW Basin.
 - Commenced readiness activities in support of removal of the KOP product material.
 - Fabrication of copper inserts for placement of KOP product material into Multi-Canister Overpacks (MCOs) baskets for removal from the KW Basin is in progress.
 - Fabrication of additional MCOs is in progress
 - The Remedial Design Report and the Quality Assurance Project Plan/Sampling and Analysis Plan for the KPS was approved by RL and EPA.



Accomplishments – 2nd Quarter 2012



KOP Size Separation Table Install



MCO Basket Install

Accomplishments – 2nd Quarter 2012

Sludge Treatment Project Phase 1- Removal of Containerized Sludge

- **Sludge retrieval and transfer system design (M-016-174)**
 - Completed formal design review of the final design associated with KW Basin Annex building and support systems.
 - Identified and initiated optimization testing on mock up systems at Maintenance and Storage Facility (MASF)
 - Completed sample analysis and data verification and validation of KW Basin settler tank sludge (Engineered Container 230).
 - Completed sample analysis for KW floor and pit sludge (Engineered Container 210). Data verification and validation currently in progress.
 - Initiated site civil work associated with rerouting utilities and roads in preparation for the construction of the KW Basin Annex building.
 - Procurement action for selecting a contractor for the construction of the Annex is underway.



Milestone Status

TPA Number	Due Date	Description	Status
M-016-172	9/30/12	Complete KOP Material Removal From 105-KW Fuel Storage Basin	On Schedule
M-016-053	12/31/12	Complete Interim Response Actions for the 100 K Area Within the Perimeter boundary and to the River for Phase 1 Actions	On Schedule
M-016-174	09/30/13	Complete Final Design of Sludge Retrieval and Transfer System	On Schedule
M-093-22	07/31/14	Complete 105KE Reactor Interim Safe Storage in Accordance with Remedial Design/Remedial Action Work Plan	On Schedule
M-016-175	09/30/14	Begin Sludge Removal from 105-KW Fuel Storage Basin	On Schedule
M-016-173	03/31/15	Select K Basin Sludge Treatment and Packaging Technology and Propose New Interim Sludge Treatment and Packaging Milestones	On Schedule
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	On Schedule
M-016-176	12/31/15	Complete Sludge Removal from 105-KW Fuel Storage Basin	On Schedule
M-016-178	12/31/15	Initiate Deactivation for 105-KW Fuel Storage Basin	On Schedule
M-093-26	12/31/15	Initiate 105-KW Reactor Interim Safe Storage	On Schedule
M-016-181	09/30/19	Complete Deactivation, Demolition and Removal of 105-KW Fuel Storage Basin	On Schedule
M-016-186	12/31/19	Initiate Soil Remediation Under 105-KW Fuel Storage Basin	On Schedule
M-093-27	12/31/19	Complete 105-KW Reactor Interim Safe Storage	On Schedule
M-016-00C	12/31/20	Complete All Response Actions in the 100 K Area	On Schedule



Project Baseline Performance

Thru March 2012

RL-0041 Nuclear Material 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
ARRA RL-0041 Capital Asset	178.2	177.7	180.9	-5	-3.2	179.7	182.5	-2.8	1.00	0.98
Base	90.9	89.8	75.1	-1.1	14.7	313.5	294.2	19.3	0.99	1.20
Total	259.5	261.3	247.5	1.8	13.9	492.5	522.7	7.7	1.02	1.06

RL-0012 Nuclear Material 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
Base Total	289.1	288.5	289.8	-0.6	-1.2	625.6	628.3	-2.7	1.00	1.00

Numbers are rounded to the nearest \$0.1M.



Planned Activities

Next 6 months

RL41: D&D / Soil Remediation

- **D4 Scope**

- 190KW Main Pump House - Complete demobilization
- 183.2KE Sedimentation Basin – Continue demolition and load out.
- 1908K Outfall Structure – Complete demolition and load out
- 183.7KE Tunnel – Complete demolition preparations
- 105KE Water Tunnel – Commence demolition and load out

- **105KE Reactor ISS**

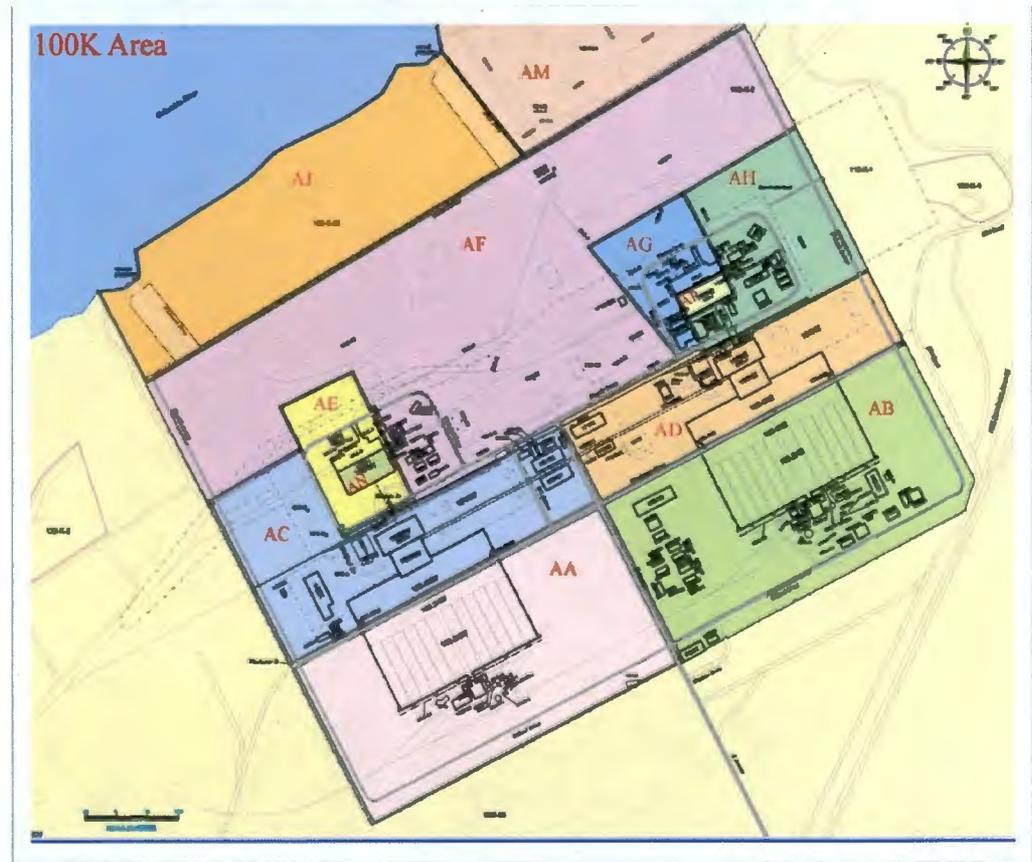
- Issue DSA Hazard Analysis and FHC
- Complete repair of 105KE reactor building openings
- Perform below-grade pourbacks
- Begin clean out of hazardous and combustible materials



Planned Activities

Next 6 months

- **Waste Site Remediation – Areas AA, AG, AH, AJ**
 - Area AG – Complete remediation of 100-K-3 and 100-K-68 through 71
 - Area AH – Complete detailed sampling plan and perform samples
 - Area AJ – Complete the RSVP for 100-K-63
 - Develop plan forward for characterization of soil in the deep vadose zone



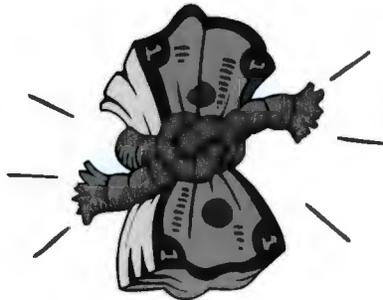


U.S. DEPARTMENT OF
ENERGY

Hanford Lifecycle Scope, Schedule and Cost Report

TPA M-036-01

Quarterly Performance Report



January-March, 2012

Stephen Korenkiewicz, DOE-RL
Lifecycle Report Project Manager



U.S. DEPARTMENT OF
ENERGY

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U.S. DEPARTMENT OF **ENERGY**

MILESTONE DESCRIPTION AND DELIVERABLE

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.

The initial 2011 Hanford Lifecycle Scope, Schedule and Cost Report (Lifecycle Report) was submitted July 25, 2011, and subsequent reports are due January 31 of each year.

RL PROGRAM MANAGERS ASSESSMENT OF CONTRACTOR PERFORMANCE

The contractor responsible for the Lifecycle Report is Mission Support Alliance, Portfolio Management.

Contractor performance related to the submittal of the 2012 Lifecycle Report, evaluation of feedback received on previous Lifecycle Reports, and development and preparation of the 2013 Lifecycle Report is on schedule.

SIGNIFICANT ACCOMPLISHMENTS FOR THE LAST THREE MONTHS

1. The 2012 Lifecycle Report was submitted to EPA and Ecology on January 17, 2012; two weeks ahead of schedule. The 2012 Lifecycle Report was posted on the DOE-RL Website to enable public access. A Fact Sheet was prepared and provided to the Hanford LISTSERV. The public review period on the 2012 Lifecycle Report began February 6, 2012, and written feedback is due by April 13, 2012.
2. The Tri-Party Agreement (TPA) Managers signed an agreement on January 12, 2012, to document the alternatives analysis operable unit waste sites and approach to be included in the 2013 Lifecycle Report (200-CW-1, 200-CW-3, 200-OA-1 and 200-WA-1).
3. The Three Parties met on February 29, 2012, to discuss specific 2011 Lifecycle Report feedback (141 comments) and draft dispositions to be addressed in the 2013 Lifecycle Report. The TPA Managers agreed that all feedback received on the 2011 and 2012 Lifecycle Reports will be posted on the DOE-RL Website to promote transparency.
4. The DOE-RL Project Manager met with Ken Niles from the Oregon Department of Energy on February 8, 2012, to discuss his feedback and comments on the 2011 Lifecycle Report.



U.S. DEPARTMENT OF **ENERGY**

5. At the March 15, 2012, meeting of the Hanford Advisory Board (HAB) Budgets and Contracts Committee (BCC), the DOE-RL Project Manager discussed how HAB advice was considered in the 2012 Lifecycle Report and will be considered for the 2013 Lifecycle Report.
6. The TPA Managers held M-036-01 Project Manager Meetings (PMMs) on the Lifecycle Report on January 12, 2012 and March 26, 2012.

SIGNIFICANT PLANNED ACTIONS FOR THE NEXT SIX MONTHS

1. The M-036-01 TPA PMM is planned for April 26, 2012, and the feedback received on the 2011 and 2012 Lifecycle Reports will be reviewed.
2. Continue work on the scope, schedule and cost requirements for producing the 2013 Lifecycle Report, including alternatives analysis development of the cost estimates.

BUDGET/COST STATUS

No issues identified.

ISSUES

No major issues identified.

NON-TPA REGULATORY ISSUES/POTENTIAL IMPACTS TO TPA

No major issues identified.




PFP Closure Project

TPA Milestone: M-083



Larry Romine, Federal Project Director
Rick Bond, Ecology Project Manager

2nd Quarter 2012
 April 19, 2012



One Culture. One Team.

Quarterly Milestone Summary

(January – March 2011)

TPA Milestone	Due Date	Status	Milestone Description
M-083-24	06/30/12	On Schedule	Submit a Surveillance and Maintenance (S&M) Plan as a primary document To Ecology
M-083-44	09/30/15	On Schedule	Complete transition of 234-5Z & -ZA, 243-Z, 291-Z and 291-Z-1 buildings to support PFP decommissioning deactivate and prepare for dismantlement of the above grade portions of these facilities
M-083-00A	09/30/16	On Schedule	Complete PFP Facility Transition & Selected Disposition Activities




Accomplishments – 2nd Quarter

- Completed removal of 167 of 238 Gloveboxes (70%)
- Continued RMA/RMC Glovebox deactivation activities; two gloveboxes removed in last 3 months
- Completed bulk area cleanout of 53 of 69 rooms.



Room 228A Removing Emergency Exhaustive Over HC-1 Conveyor
CH2MHILL
Plateau Remediation Company

Accomplishments – 1st Quarter

- Completed decommissioning (ready for demo) of vault facilities & demolition is nearly complete



2736-Z/ZB Complex Facilities Demolition



CH2MHILL
Plateau Remediation Company

Accomplishments – 2nd Quarter

- Continued disposition of Process Vacuum System Piping (22%; 1,210 of 5,500 ft.), Process Transfer Lines (51%; 594 of 1,154 ft.) and Asbestos Insulation from Piping (67%; 16,268 of 24,000)



First 26" Process Vacuum Removal Site
Note the Congested Quarters



Wrapping 26" Process Vacuum Piping Prior to Removal
Note: Close Quarters Underneath Supply Ducting



Accomplishments – 2nd Quarter

- Completed size reduction of 80 of 196 pencil tanks (Thru 3/31/12). 60 pencil tanks completed this Fiscal Year
- Continued mechanical & electrical of the PRF Miscellaneous Treatment (Room 41) glove boxes
- Continued isolations for the PRF Column glove boxes



First SLB2 Shipment from PFP to CWC (Gloveboxes HC-11 and HA-14DC)



Planned Activities

Next 6 months

- Complete demolition of PFP Vault complex
- Continue 234-5Z glovebox clean out, removal and disposition
- Continue 234-5Z process vacuum piping and transfer lines removal
- Continue 234-5Z asbestos removal
- Continue PRF Canyon pencil tank size reduction and removal
- Continue PRF glovebox cleanout and removal (Miscellaneous Treatment & Column glove boxes)
- Submit PFP S&M Plan to Ecology



Project Baseline Performance

Contract to-Date (through March 2012)

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	\$475,584	\$472,585	\$482,148	(\$2,998)	-0.6%	(\$9,563)	-2.0%	\$889,114	\$898,677	(\$9,563)
ARRA	\$285,024	\$281,303	\$289,094	(\$3,721)	-1.3%	(\$7,791)	-2.8%	\$290,945	\$298,735	(\$7,791)
Base	\$190,550	\$191,282	\$193,054	\$723	0.4%	(\$1,772)	-0.9%	\$598,170	\$599,942	(\$1,772)

Numbers are rounded to the nearest \$K.



Project Baseline Performance

Fiscal year to-date

FYTD Schedule Performance: (-\$3.4M)

- Resource Constraints Associated with Workforce Restructuring
- Radiological Controls Issues
- RMA/RMC Delays resulting from reassigned field work teams (i.e., bulk area cleanout, canyon crane repairs)

FYTD Cost Performance: (-\$2.6M)

- Inefficiencies associated with 234-5Z bulk area cleanout efforts, more time required to complete removal of 2736ZB contaminated duct work, and utilization of PFP resources to support 2736ZB demolition preparation efforts as a result of unavailability of Balance of Site resources required to complete demolition of the 209E facility



Issues/Challenges

Regulatory Issues:

- None

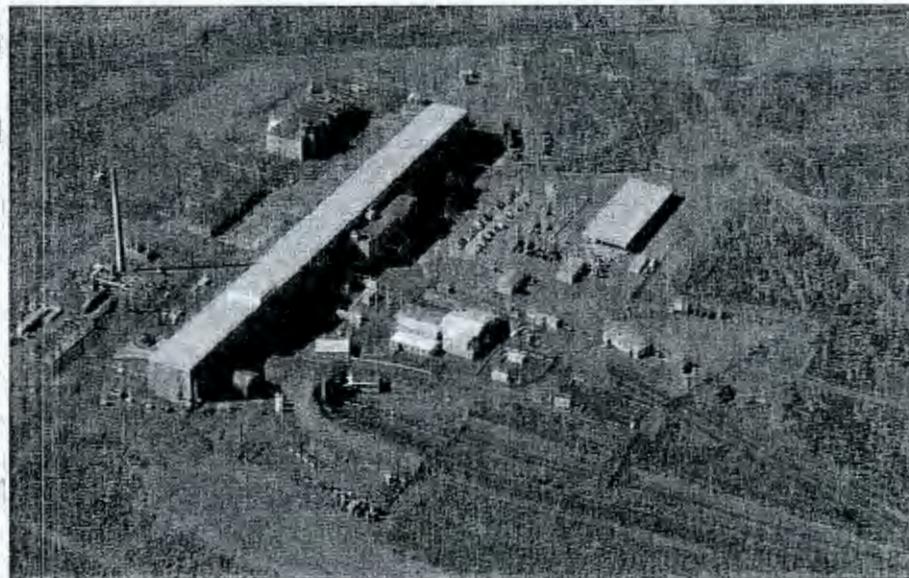
Non-Regulatory Issues:

- Utilization of current resources/staff productivity
- Work package development to ensure timeliness, quality & backlog
- Staff retention
- FY-13/14 Budgets to sustain Performance Measurement Baseline
- Aging equipment/components



Department of Energy – Richland Operations Office

**Tri-Party Agreement
Quarterly Milestone Review
M-91 Series**



April 19, 2012



E
M **Environmental Management**

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Significant Accomplishments of the Last Three Months

- M-091-40 Retrievably Stored Waste (CH) – Target: Retrieve 250 m³ by 09/30/12 – No waste retrieved
- M-091-41 Retrievably Stored Waste (RH) – Complete non-caisson retrieval by 09/30/16 – No waste retrieved
- M-091-42 MLLW (CH, small container) – Complete treatment by 09/30/17
 - Two drums treated
 - 10 m³ in aboveground storage
- M-091-43 MLLW (RH and large container) – Complete treatment by 09/30/17
 - No waste treated
 - 58 m³ in aboveground storage



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Significant Accomplishments of the Last Three Months

- M-091-44 TRUM Waste (RH and large container) – Certify 300 m³ by 09/30/18
 - Three drums repackaged into a WIPP-certifiable waste form
 - 9,960 m³ in aboveground storage (includes M-091-46 TRUM waste and TRU waste)
- M-091-46 TRUM waste (CH, small container) – Target: Certify 300 m³ by 09/30/12 – No waste certified
- Non-TPA – DOE-EM 90% TRU Waste Disposition Goal – Hanford Contribution
 - No waste dispositioned
 - Starting – 16,553 m³, remaining – 11,146 m³



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Department of Energy – Richland Operations Office

Fiscal Year 2012 (through April 2012) Performance Measurement

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	5,247.9	5,247.9	5,092.1	0.0%	3.0%
Waste Receiving and Packaging Facility (WRAP)	1,351.1	1,351.0	2,270.6	0.0%	-68.1%
T Plant	4,266.7	4,266.7	3,852.2	0.0%	9.7%
MLLW Treatment	50.3	1,391.6	1,237.9	2666.6%	11.0%
TRU Waste Retrieval	283.0	626.9	309.4	121.5%	50.6%
TRU Waste Repackaging	1,770.2	1,868.2	2,661.6	5.5%	-42.5%
TRU Waste Disposition	0.0	0.0	3.2	0.0%	0.0%
Project Management	6,171.9	6,097.0	5,889.6	-1.2%	3.4%



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Variance Analysis

- The positive schedule variances for MLLW Treatment and TRU Waste Retrieval are due to work originally scheduled in FY 2011 being performed in FY 2012.
- The negative cost variances for WRAP and TRU Waste Repackaging are due to extra work associated with cleanup of contamination in 2404-WB and lay up activities.
- The positive cost variance for TRU Waste Retrieval is due to work scope requiring less resources than planned.



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Actions Planned for Next Six Months

- M-091-03 – Submit 2012 Project Management Plan
- M-091-42 – Receive two drums of treated waste back from Permafix East
- M-091-46 – Receive drum of WIPP-certifiable waste back from Permafix Northwest
- Complete WRAP, T Plant, LLBGs lay up work (e.g., move waste to the Central Waste Complex, clean up or stabilize remaining contamination areas, move equipment and supplies to storage, maintain ventilation and fire protection, document facility conditions)
- Support permitting activities



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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

Second Quarter FY2012
April 19, 2012

Accomplishments – 2nd Quarter 2012

Completed TPA Milestones:

- None during 2nd Quarter 2012

U Canyon Grout Fill

- Completed demobilization of the U Canyon Project

209E Critical Mass Laboratory

- Completed demolition, load out and demobilization



Accomplishments – 2nd Quarter 2012

Response to Asbestos concerns

- Stabilize suspected asbestos areas following demolition.



272 E footprint



284 E Powerhouse footprint



7 Industrial Facilities



Accomplishments – 2nd Quarter 2012

Industrial D&D/Facilities

- 209E Critical Mass Lab disposition - 9,073 sq. ft.



209E demolition complete



209E before demo



209E during demo



Project Baseline Performance

Contract to date (Through March 2012)

WBS 040/ RL-0040 Nuclear Facility D&D	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)
U Plant/Other	199.4	199.3	193.2	(0.1)	-0.0	6.1	3.1	199.4	193.5	5.9
Outer Zone	<u>84.3</u>	<u>84.3</u>	<u>71.7</u>	<u>0.0</u>	0.0	<u>12.6</u>	15.0	<u>84.3</u>	<u>71.7</u>	<u>12.6</u>
ARRA Total	283.7	283.6	264.9	(0.1)	-0.0	18.7	6.6	283.7	265.1	<u>18.6</u>
Base	<u>74.1</u>	<u>74.0</u>	<u>66.7</u>	<u>-0.1</u>	-0.1	<u>7.3</u>	9.8	<u>686.7</u>	<u>667.6</u>	19.0
Total	357.8	357.6	331.6	(0.2)	-0.0	26.0	7.3	970.4	932.7	37.6

Numbers are rounded to the nearest \$0.1M.



Milestone Status

TPA Number	Commitment 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-085-01	09/30/12	Submit Change Package to establish date for major Milestone M-85-00	On Schedule
M-085-50	12/31/15	Submit Revised RAWP for the 224-B Concentration Facility in accordance with the Action Memo for the Non-Time Critical Removal Action for the 224-B Plutonium Concentration Facility (DOE/RL-2004-36). A change package with a completion milestone will accompany the submittal of the work plan.	On Schedule
M-085-60	03/31/18	Complete EE/CA Report(s) for all Tier 2 Facilities listed in Appendix J	On Schedule
M-085-51	12/31/25	Submit RAWP for the 224T TRUSAF in accordance with the Action Memo for the Non-Time Critical Removal Action for the 224-T Plutonium Concentration Facility (DOE/RL-2004-68). A change package with a completion milestone will accompany the submittal of the work plan.	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

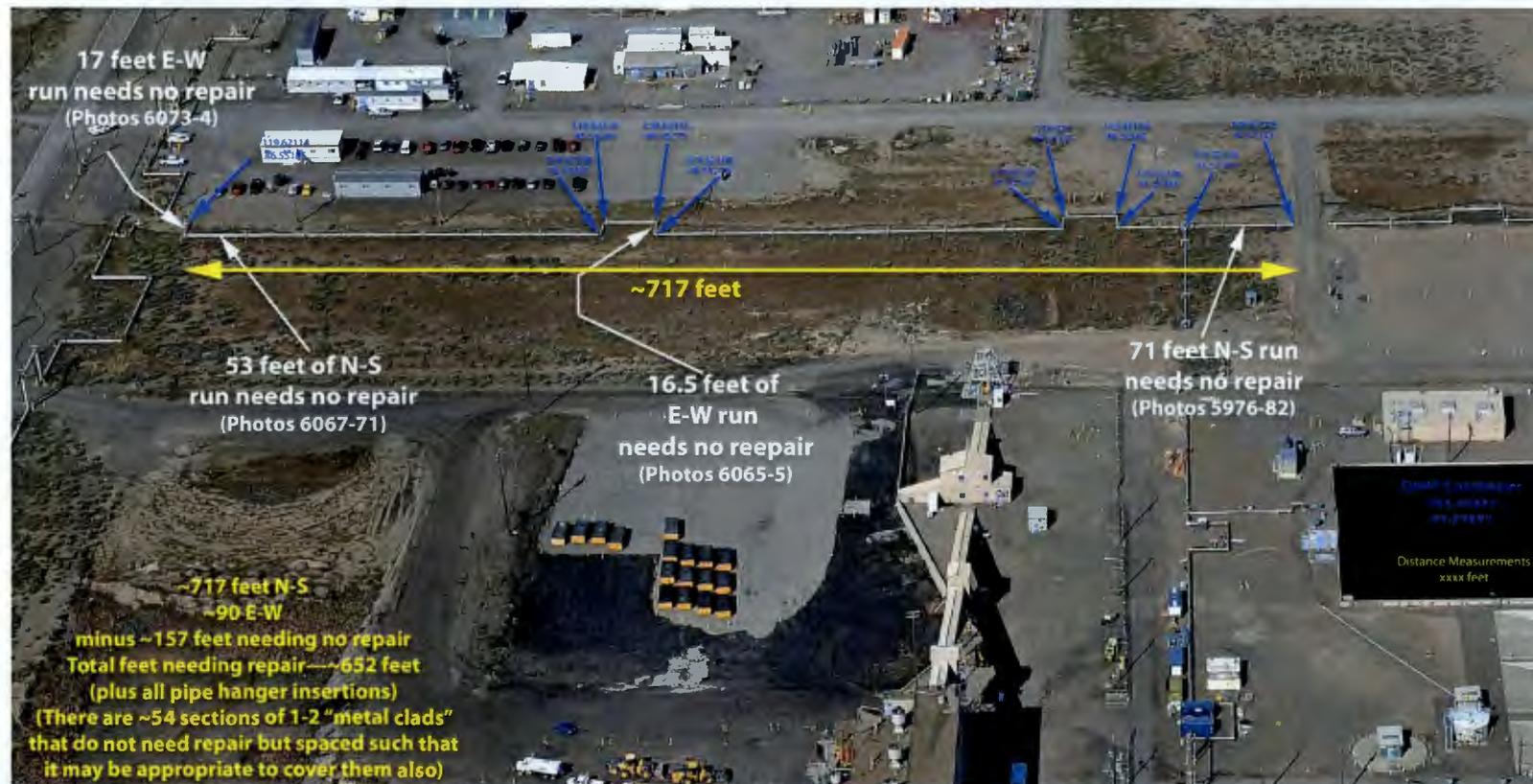


Planned Activities

Next 6 months

Asbestos Abatement

- BCR in progress to abate identified sections of damaged steam lines in 200W



Planned Activities

Next 6 months

MG-1

- Priority work if funds become available.

U Canyon

- None





CH2MHILL
Plateau Remediation Company



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**

**Second Quarter FY2012
April 19, 2012**



Accomplishments – 2nd Quarter

Pump and Treat Operations

- Treated 285.9 million gallons of groundwater
- Removed 355.2 kg of contaminants from the groundwater

Drilling and Decommissioning

- 5 groundwater wells installed

Sampling

- 2,792 samples collected
- 10,363 analyses received



UP-1: EBT-3 Transfer Pumps



Accomplishments – 2nd Quarter

200 West Area Groundwater Treatment Facility

- Commissioned Membrane Biological Reactor
- Completed 12 out of 23 Acceptance Test Procedures



March Aerial – 200 West Pump and Treat



Accomplishments – 2nd Quarter

200-UP-1

- Construction and Acceptance Test Procedure of the Waste Management Area S-SX extraction system was completed, except for final pipeline connects to the 200 West Treatment Facility and the well racks.

200-BP-5

- All seven crossings were completed and all above-ground pipeline has been placed (~8500 ft total).
- The fabrication of mechanical and electrical well racks were completed and installed on-site. Effluent Treatment Facility pipeline tie-in activities have been completed.



Accomplishments – 2nd Quarter



BP-5 Crossing West of BX Farm



BP-5 HDPE Layout



FY2012 Progress

Soil and Groundwater Treatment Progress FY2012

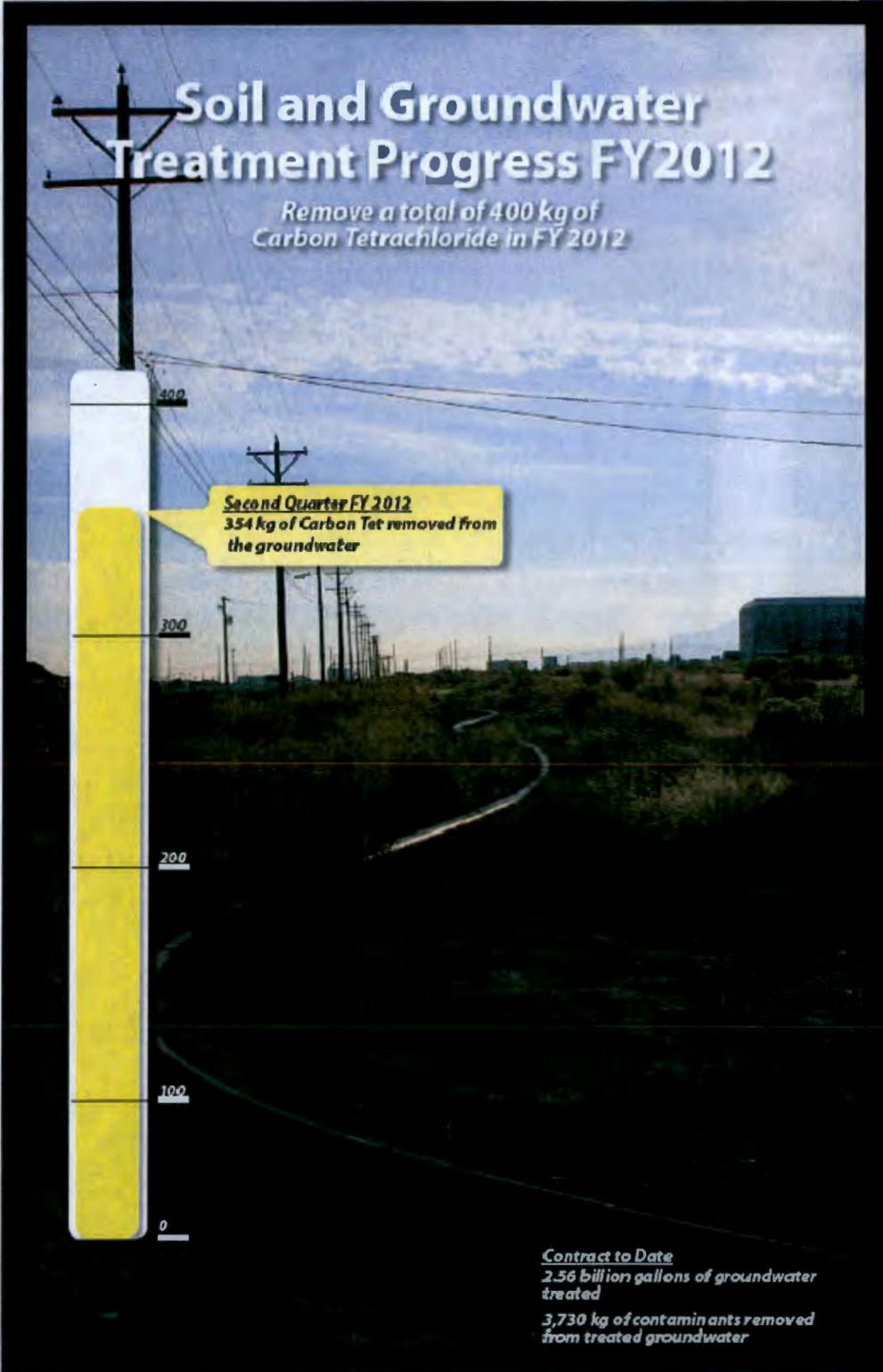
Treat a total of **ONE BILLION** gallons of groundwater in FY 2012



Second Quarter FY 2012
589 million gallons of groundwater treated

Contract to Date
2.56 billion gallons of groundwater treated
3,730 kg of contaminants removed from treated groundwater



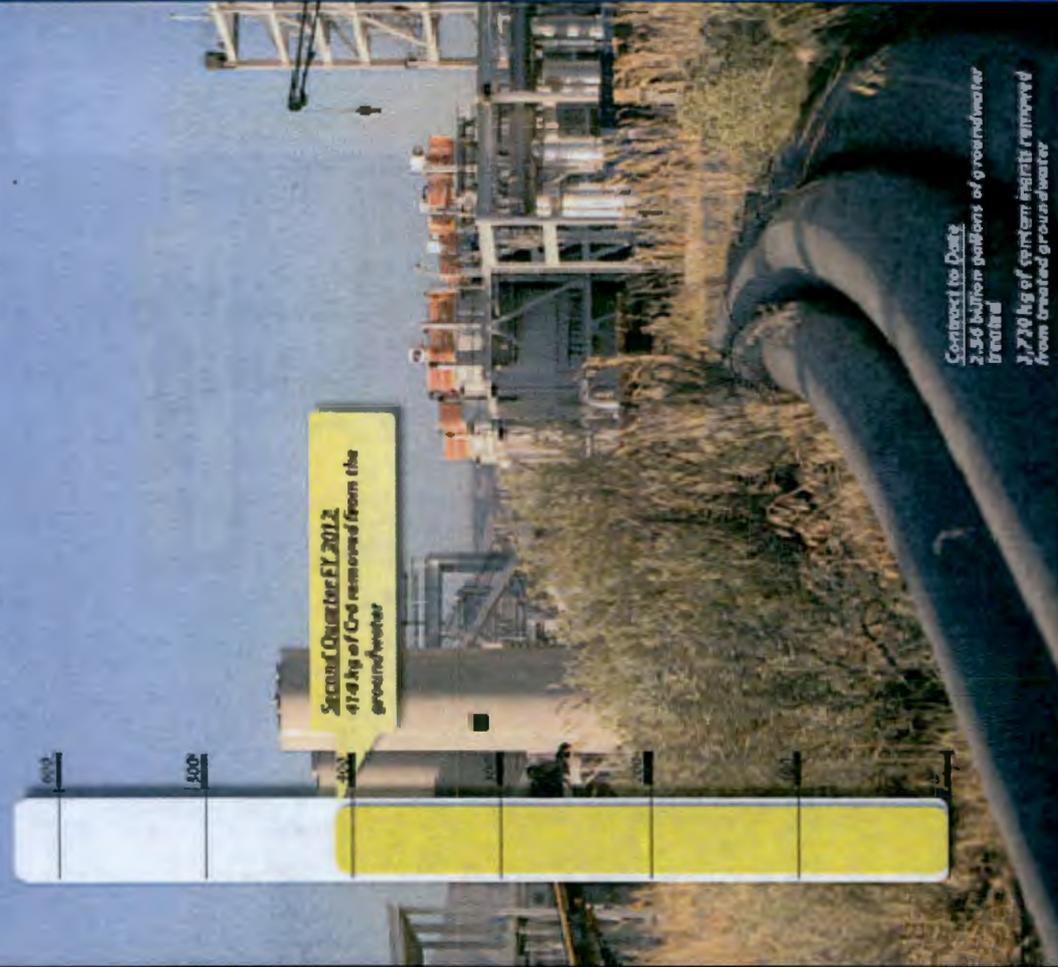


FY2012 Progress

FY2012 Progress

Soil and Groundwater Treatment Progress FY2012

Remove a total of 600 kg of Hexavalent Chromium in FY 2012



Contract to Date:
2.36 billion gallons of groundwater treated
3,720 kg of chromium hexaglycinate removed from treated groundwater



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-015-70-T01	11/24/11	(Project Forecast Date: 10/26/2012) Submit FS Report and PP for 100-HR-1/2/3 and 100-DR-1/2 OUs	Missed
M-015-68-T01	11/30/11	(Project Forecast Date: 11/14/2012) Submit RI/FS Report and PP for 100-BC-1/2/5 OUs for GW and Soil	Missed
M-015-64-T01	12/17/11	(Project Forecast Date: 11/20/2012) Submit RI/FS Report and PP for 100-FR-1/2/3 and 100-IU-2/6	Missed
M-015-110D	06/30/12	Submit Tc-99 Pilot Scale Treatability Study Test Report as an element of RI for 200-WA-1 to EPA (Desiccation Test Report)	On Schedule
M-015-62-T01	09/17/12	(Project Forecast Date: 12/13/2012) Submit FS/PP for 100-NR-1/2 OUs Including GW and Soil	Behind Schedule
M-015-00D	12/31/12	Submit PP for all 100 & 300 Area OUs to Complete RI/FS Process	On Schedule *
M-016-00	Complete Remedial Actions for all Non-Tank Farm and Non-Canyon Operable Units		
M-016-120	08/31/12	Groundwater Treatment System for the Tc-99 plume at the S/SX Tank Farm	On Schedule
M-016-110-T01	12/31/12	Take Actions to Contain or Remediate Hexavalent Cr 100A GW Plumes	On Schedule

*Activities to meet target dates for M-015-70-T01, M-015-68-T01, M015-64-T01, and M-015-62-T01 are behind schedule; however, project is on schedule to meet M-015-00D.

Funding



Milestone Summary

TPA Number	Milestone or Target Date	Milestone/Target Title	Status
M-024-00 – Complete Well Installations with RCRA/CERCLA Requirements			
M-024-58E	06/01/12	Initiate Discussions of Well Commitments	On Schedule
M-024-63-T01	08/01/12	Conclude Discussions of Well Commitments	On Schedule
M-024-63	12/31/12	DOE Shall Complete Construction of all Wells Listed	On Schedule
M-037 – RCRA Closures			
M-037-03	04/30/2013	Submit Revised Closure Plans to support TSD closure for two (2) TSD Units: 216-B-3 Main Pond system, and 216-S-10 Pond and Ditch.	On Schedule*

**Ecology and DOE working to evaluate revisions to draft closure plans.*



Project Baseline Performance

Through March 2012

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 (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Base RL-0030.C1 GW Remedy Implement	63.6	64.8	70.7	1.2	1.9	(3.9)	-9.1	<u>73.4</u>	<u>80.1</u>	<u>(6.7)</u>
ARRA RL-0030.R1.1 Cleanup Operations	175.0	175.0	174.7	0.0	0.0	0.3	0.2	<u>175.0</u>	<u>175.0</u>	<u>0.0</u>
ARRA RL-0030.R1.2 Well Drilling Operations	<u>40.7</u>	<u>40.7</u>	<u>38.4</u>	<u>0.0</u>	0.0	<u>2.4</u>	5.8	<u>40.7</u>	<u>38.4</u>	<u>2.4</u>
Subtotal RL-0030.C	279.3	280.5	283.8	1.2	0.4	(3.3)	-1.2	<u>289.1</u>	<u>293.5</u>	<u>(4.4)</u>
Base RL-0030.O1 RL 30 (Operations)	417.3	418.7	420.6	1.4	0.3	(1.7)	-0.4	<u>1,251.2</u>	<u>1,245.7</u>	<u>5.5</u>
ARRA RL-0030.R1.3 Support Operations	<u>51.4</u>	<u>51.4</u>	<u>51.1</u>	<u>(0.0)</u>	-0.0	<u>0.3</u>	0.5	<u>51.4</u>	<u>51.1</u>	<u>0.3</u>
Total	<u>748.0</u>	<u>750.6</u>	<u>755.5</u>	<u>2.6</u>	0.4	<u>(4.9)</u>	-0.6	<u>1,591.7</u>	<u>1,590.3</u>	<u>1.4*</u>

Numbers are rounded to the nearest \$0.1M.

**This task is not fully funded, the project is currently evaluating options to address funding shortfalls.*



Planned Activities

Next 6 months

200-ZP-1 / 200-PW-1 Soil Vapor Extraction

- Complete layup of ZP-1 interim pump and treat system
- Complete Integrated Acceptance Test Procedure for 200 West P&T system
- Turnover 200 W P&T to Operations
- Begin PW-1 SVE operations
- Complete hookup of 5 interim injection wells to 200 West P&T system

200-UP-1

- Complete turnover process and initiate operations for S/SX groundwater extraction system
- Issue Rev. 0 RI/FS Report and Proposed Plan, complete public review, and obtain ROD

200-BP-5

- Complete construction of aquifer treatability test equipment



Planned Activities

Next 6 months

200-DV-1

- Project is on schedule to meet TPA M-015-110D, due June 30, 2012: *Submit Tc-99 Pilot Scale Treatability Study Test report as an element of remedial investigation for the 200-BC-1/200-WA-1 OUs to EPA*

300 Area

- Issue Rev 0 RI/FS Report and Proposed Plan, complete public review, and obtain ROD

100 K Area

- Issue Rev 0 RI/FS Report and Proposed Plan, complete public review, and obtain ROD

