1216119

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

Approval: _____ Date: 8/16/12
J. Hedges
Ecology IAMIT Representative

Approval: _____ Date: 8.16.12
J.A. Dowell
DOE IAMIT Representative

Approval: _____ Date: 8/16/12
D.A. Faulk Rod Lobos for D. Faulk.
EPA IAMIT Representative

Minutes Prepared by: _____ Date: 8/16/12
T.W. Noland
Mission Support Alliance, LLC

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

*Attendees

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River Corridor/Central Plateau
Tri-Party Agreement Milestone Review
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River Corridor Closure Project - Milestones M-16/M-89/M-92/M-93/M-94

Quarterly Summary (April - June 2012) - Ecology inquired about a time frame to discuss the series of milestones under M-16-00A. DOE-RL responded that an internal review of milestone completion dates and incorporation of Ecology comments is under way in an effort to submit a proposal to Ecology that is acceptable. DOE-RL estimated that discussions could be started in the August-September 2012 time frame with the goal of reaching agreement by the end of the fiscal year (9/30/12). DOE-RL reported that change package M-89-12-01 proposing revised milestones and completion dates was submitted to Ecology and EPA, and the proposed change request has gone into dispute. DOE-RL, Ecology and EPA held a discussion yesterday (7/18/12) to begin working through various proposals.

Milestone Status:

M-16-145 - DOE-RL reported that remediation of all the trenches in the 100-K Area have been completed except trench N in 118-K-1 where the tritium contamination was discovered. The K Area feasibility study proposed plan (FS/PP) was submitted for regulator review, and DOE-RL completed discussions with EPA on the FS/PP. DOE-RL will conduct additional evaluation and modeling of the trench N source, along with other sources of tritium in the K Area. DOE-RL indicated that an interim cap may be placed on trench N. DOE-RL added that following the final Record of Decision (ROD), another cap would be placed (if that is the agreed-to path forward) to allow the tritium to decay for the next 50 years, and to continue with the pump and discharge upgradient. DOE-RL noted that an amendment to the final ROD would be required since it would cost up to ten million dollars or more to dig up the cap. EPA stated that DOE-RL would be at risk to do a cap because the remedy that is anticipated to be selected is remove, treat, dispose (RTD).

Significant Accomplishments - For Last 3 Months:

M-16 - Remedial Action/Risk Assessment - DOE-RL reported that the PNNL groundwater sampling activities with the aquifer tubes at C-7:1 are under way, and the results were provided to Ecology at the last unit managers meeting. DOE-RL stated that with resolution of the dispute on 100-H waste site documents, sampling is being conducted and initial sample results for 126-H-2 were received yesterday. Sampling was conducted underneath the clearwell floor to check for contamination, and no rad or chromium were detected. The sample results for selenium are expected today. DOE-RL reported that closeout activities at 100-F-57 are under way, and all of the remediation activities at 100-F will be completed when formal closeout is completed. The site will

then be turned over to MSA for long-term surveillance and maintenance. DOE-RL stated that through June 2012, about 63,000 cubic meters have been remediated at the 618-10 burial ground. The estimate on the number of drums to be excavated has dropped from 2,000 to 1,500, and the number may continue to drop. DOE-RL noted there was one drum that had a slight pyrophoric reaction due to depleted uranium oxide inside a container in the drum, and paper and wood. Ecology asked if the drum has been moved off to the side. DOE-RL responded that the drum was moved into the trench. WCH has a technical review group that is planning the path forward for the drum, which will be to mix the contents of the drum with soils to ensure it has reacted and is stabilized before moving it to ERDF.

M-89 - 324 Building - DOE-RL noted that starting at the end of May 2012, concreted drums have been shipped directly to ERDF. A large cost savings has been achieved by being able to ship directly.

M-94 - DOE-RL reported that demolition and removal of the 327 building above and below grade was completed. There were about 11 hot cells that were removed.

ERDF - Ecology asked about a schedule for out-of-trench treatment for the long-length equipment. EPA indicated that there is a lot of planning to do before the work can be completed. Ecology asked if there will be any temporary storage capacity. DOE-RL responded that two staging areas have been selected, although it is not known if that specifically includes the area of the long-length equipment. EPA noted that a ROD amendment will need to be done, and the expectation is that it will take three to five years to complete. EPA added that it fundamentally disagrees that the ERDF Performance Assessment (PA) needs to be linked with the Environmental Impact Statement (EIS), and asked about the schedule indications. DOE-RL stated that a schedule is in place that it is working to, and the strategy is to not do anything that would be inconsistent with the EIS. EPA responded that DOE-RL should not make that assumption because the EIS and the ERDF PA are being done for different purposes. EPA added that the parties need to ensure the ERDF PA accurately reflects the activities at ERDF and that the PA makes technical sense. DOE-RL responded that it is on track to meet EPA's expectations, and a draft PA is forecasted for internal review in August 2012. DOE-RL added that a detailed engineering analysis was done on ERDF, and the analysis explains the differences in the ERDF PA from the EIS and where the PA is updated.

Significant Actions Planned - For Next Six Months

M-16 - Remedial Action/Risk Assessment - DOE-RL stated that the Segment 5 miscellaneous restoration debris removal will be completed, and Segments 1-5 will be closed out and turned over to MSA. EPA suggested that DOE-RL review its framework document to ensure it doesn't presuppose EPA's final decisions. EPA referred to a section in the document that discusses how all the work is done on the segments and that there is no further action, but there is no basis for closure provided in the document.

M-94 - 300 Area Surplus Facilities Disposition - DOE-RL stated that the contractor is

moving forward to remove the reactor from 309. When the initial piling holes were drilled in the concrete, it was too dense to be able to drill deep enough and provide structural stability for the lift points. The lift points have been moved out and drilling is under way. DOE-RL anticipates that the reactor will be lifted out by the end of December 2012.

Performance Summary - DOE-RL reported that the projects continue to do well from a cost and schedule standpoint. The final buy-back project under ARRA has been completed, and the ARRA work is done and will no longer be reported.
Issues - There were no questions or discussion regarding the issues with the 100 and 300 Areas. The 100-N, 100-D and 100-H Areas will have separate subcontracts that WCH will be awarding at the end of FY12 (September 30, 2012).

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

Accomplishments - 3rd Quarter 2012:

D4 - DOE-RL reported that the contractor is on schedule to complete all the concrete pourbacks around the K East reactor substructure and superstructure by mid-October 2012.

Waste Sites - DOE-RL reported that a lot of the clean soil piles have been pushed back into the holes in Area AA Zone 2, and clean soil from ERDF is now being brought in. The concrete debris from the K West sedimentation basin is being taken to U Plant for cap material.

Sludge Treatment Project (STP) - Removal of KOP Material (M-016-172) - DOE-RL reported that two multi-canister overpacks (MCOs) have been loaded with the copper inserts containing knockout pot (KOP) material. Inserts for the third MCO are currently being filled. DOE-RL indicated that it is possible only five MCOs will be needed, and possibly six. Nuclear safety concerns limit the amount of KOP material per MCO. DOE-RL stated that this milestone is on track to meet the September 30, 2012 milestone.

STP Phase 1 Removal of Containerized Sludge (M-016-174) - DOE-RL reported that the final design for the sludge retrieval and transfer system is on track to meet the September 30, 2013 milestone a year ahead of schedule. EPA inquired about the planned and scheduled environmental documentation needs for sludge storage at T Plant. DOE-RL responded that the purpose of the documentation is to ensure that T Plant will be able to accept the sludge for storage. EPA noted that CERCLA paperwork changes will also be needed. DOE-RL acknowledged that CERCLA paperwork is being drafted, and the subject should have been noted on today's handout. On the subject of CERCLA paperwork, EPA inquired about the proposed plan ROD for 100-K, which is not noted in the next six months activity. DOE-RL responded that the intent is to have the proposed plan ROD issued, and DOE-RL believes it is on track for issuing the document.

Milestone Status - DOE-RL reported that all of the milestones listed through 2020 are on

schedule, with the assumption that the submission for 2014 funding is received. EPA noted a concern that some of the work, such as the phase 2 waste sites, does not have enough funding to meet their milestones. DOE-RL responded that the phase 2 work is not funded at this time, but efforts are under way to obtain funding from other sources within the organization. DOE-RL added that all five of the projects are currently on stretch goals, but the intent is to meet all the commitments. Ecology stated that K Area milestones have been changed many times, and EPA stated its position that no more changes will be accepted. DOE-RL acknowledged Ecology's and EPA's position.

Project Baseline Performance - DOE-RL noted that the project performance chart is contract-to-date and not a monthly report. RL-41 and RL-12 have been regaining on the schedule and cost performance.

Planned Activities Next Six Months:

D4 - DOE-RL reported that everything will be taken out of the 183.2KE sedimentation basin except for the floor. The south wall that is adjacent to the head house will be left to provide structural support for the soil column until funding is available for remediation of the phase 2 waste sites. The same problems are anticipated that were encountered at the K West sedimentation basin with mercury and lead going down to about 45 feet. DOE-RL stated that demolition and loadout of the 105KE water tunnel has been completed. DOE-RL noted that work that is not supportive of the 2015 vision was deferred. Work planning will continue for the K East facilities to be demo ready when funding is made available.

105KE Reactor ISS - EPA asked when the sampling data for the waste sites adjacent to the reactor will be available. DOE-RL responded that some of the data has been received and is being incorporated into a Remaining Site Verification Package (RSVP). DOE-RL stated that it is working with EPA to address the UPR-100-K-1 waste site. EPA asked when all the sampling data will be received that will show that capping is the protective remedy. DOE-RL indicated that the data will be received by next spring. EPA urged DOE-RL to gather all the sampling data before spending money on Interim Safe Storage (ISS), and reiterated EPA's position that there is a risk the capping remedy would not be protective and the reactor would have to be removed.

Waste Site Remediation - Areas AA, AG, AH, AJ - DOE-RL noted that all of the facilities have been completed, and the final soil issues need to be addressed. The milestone to complete phase 1 is anticipated to be completed before the December 31, 2012 due date.

Lifecycle Report - M-036-01

DOE-RL reported that work is under way on the third lifecycle report, which is due January 31, 2013. EPA requested that the Tri-Parties consider reviewing the need to produce a lifecycle report in 2014, or whether the report could be produced on a different schedule. EPA stated the reason for requesting a review is that it is questionable whether

the information in the lifecycle report is worth the expenditure of funds. EPA added that it makes sense to complete the 2013 lifecycle report. DOE-RL noted that discussions for the 2014 lifecycle report would begin in February 2013. DOE-RL suggested scheduling the lifecycle report as a topic for discussion this fall during the Inter-Agency Management Integration Team (IAMIT) meeting.

PFP Closure Project - TPA Milestone M-083

Quarterly Milestone Summary (April - June 2012) - DOE-RL noted that the surveillance and maintenance (S&M) plan was submitted, meeting milestone M-083-24. DOE-RL and Ecology signed off on a new target milestone that will update the S&M plan three months ahead of demolition of the facilities.

Accomplishments - 3rd Quarter - DOE-RL noted a slight correction to today's handout that 175 gloveboxes have been removed, and that No. 176 is almost ready to be removed. DOE-RL reported that one of the carriages that carries the control cable on the crane in the cell came apart. A work package is being prepared to do the repair. At the time the repair is done, the annual maintenance on the crane will also be performed. The work in the cell is done in a supplied air entry and is very labor intensive, so the project will take advantage of conducting the crane maintenance along with the carriage repair. DOE-RL reported that in the last quarter the team gained a full shift cost savings for the Plutonium Reclamation Facility (PRF) by determining ways to prevent going to a two-shift operation through working more effectively. DOE-RL referred to the failure of the EF-1 fan last summer, which shut down work for several months. A major effort has been invested into improving the ventilation posture. Four operational fans are required for intrusive work, and a fifth fan has been repaired that can be made operational. A sixth fan is within a couple weeks of being operational. Effort has also been invested to improve maintenance on systems, which has resulted in better success getting work done with fewer shutdowns in the last few months.

Project Baseline Performance - DOE-RL reported that the cost and schedule performance have a slight negative variance. However, with the investments made to improve operations, as well as improved work packages resulting in fewer stop works, the earned value performance for the last two months was exceptionally good. The goal is to continue the trend and maintain continuity with the work force.

Value Engineering/7 Sigma Initiatives - DOE-RL reported on some of the areas being considered in an effort to improve how work gets done in PFP. One of the three major initiatives being implemented is the remove TRU whole, which looks at ways to remove larger components or companion gloveboxes at one time to reduce the amount of time to take the glovebox out of the facility. Eliminating size-reduction in the facility will save millions of dollars and about a year of schedule, and will allow the use of Permafix or Waste and Fuels capability, which are design to do that work.

Planned Activities Next 3 Months - DOE-RL noted a typo on the last page of the handout for the PRF facility. In the line for pencil tank size reduction, the numbers 99 9 should be

deleted. The line should read "repair canyon crane and size reduction of pencil tank assembly 39." DOE-RL noted that the MT gloveboxes are located on the upper floor of PRF. All of the prep work will be done to remove the MTs, but they'll be removed when the facility is demolished, saving several million dollars and four to six months or more of time. EPA asked about the mechanical isolation to the MTs. DOE-RL explained that before a glovebox can be removed, all of the electrical energy sources to the glovebox have to be disconnected. Any process lines that carried chemicals or nuclear materials have to be isolated. Ecology asked where all the shipping containers will be located since the Waste Isolation Pilot Plant (WIPP) is not open. DOE-RL responded that the shipping containers will be stored on site at the Central Waste Complex (CWC) in a warehouse.

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

DOE-RL reported that the annual LDR report is in Ecology review. Ecology has indicated that additional time will be needed to review the LDR report.

TPA Quarterly Milestone Review M-91 Series

DOE-RL reported that there was no waste retrieval in the last three months. No mixed low level waste treatment or transuranic (TRU) waste repackaging or shipment was done in the last three months. The M-091-03 Project Management Plan (PMP) was submitted to Ecology in June 2012 and is being reviewed. EPA noted that the M-091 milestones are at risk.

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

Accomplishments - 3rd Quarter 2012 - EPA initiated a discussion regarding the current asbestos abatement work in 200 West, and stated that it was not aware that the asbestos work was ongoing. EPA asked DOE-RL yesterday if the asbestos work was CERCLA work and if it was, what the authorizing document was to conduct the work. DOE-RL responded that it was CERCLA work and did not know what the authorizing document was. EPA pointed out that prior approval is needed from EPA before CERCLA asbestos work is started. EPA noted that the approval is under a gentlemen's agreement between EPA and DOE-RL and is not enforceable. EPA also asked if DOE-RL is working under a CERCLA document that allows the waste to be disposed at ERDF. Another issue EPA raised is that the asbestos work site does not appear to be adequately controlled as far as the work practices. EPA was at the site and noted that there were no barriers or signs to indicate what work was being done. EPA also noted that there were two workers in full personal protective equipment (PPE) and two laborers standing next to them with no protective equipment. *DOE-RL took the action to provide a response to the issues EPA raised.* EPA stated that its main issue is if DOE-RL is working under a CERCLA document to dispose the waste at ERDF.

DOE-RL continued reporting on the asbestos work on the 717-foot section of pipe that is critical to remove. The pipe is being wrapped in glovebags and cut in 20-foot sections and then placed in a cradle box. DOE-RL stated that the boxes will not be moved to

ERDF until EPA's questions are answered. EPA also noted that the plastic on a pipe at the 284 West powerhouse has weathered off and is hanging loose, and requested that the plastic be replaced. EPA added that the plastic is accessible to any employee on the road. *DOE-RL took the action to remedy the 284 West pipe.*

Ecology raised the subject of the permit modification that is being done for the Conex box located at FFTF. Ecology suggested moving the box to the sodium storage module at CWC as a way to save money, and then close the site where the Conex box is sitting at FFTF. EPA asked about the three ERDF cans located at the Low-Level Burial Grounds (LLBG). The cans are marked full and have been sitting at LLBG for about two years. DOE-RL responded that the cans are on the list of layup activities for LLBG. EPA suggested marking the cans while they are sitting at LLBG.

Ecology noted that the 200 Area unit managers meeting scheduled for this afternoon was canceled this morning, and requested earlier notification. DOE-RL responded that a message will be sent to the federal project directors requiring a three-day notification, and if the project manager is not available, a formal delegation will be made for a representative to attend the meeting.

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

Accomplishments - 3rd Quarter:

Completed TPA Milestone M-015-110D - DOE-RL reported that the Tc-99 pilot scale treatability test report was submitted to EPA, and there were lessons learned regarding the use of desiccation (drying technologies) to mitigate releases to the groundwater. There were also some other techniques discovered that might be able to extract contaminants using a high vacuum approach. EPA asked if enough information was gained to implement desiccation as a remedy. DOE-RL responded that the test results are promising, and there is enough information to do a fairly accurate engineering analysis.

200 West Area Groundwater Treatment Facility - DOE-RL reported that the groundwater treatment facility is in operational performance testing, and for the last two weeks groundwater has been pumped and contaminants are being removed.

200-UP-1 - DOE-RL reported that within a month the water from SX extraction system will be treated. EPA asked if the water will be sent to the Effluent Treatment Facility (ETF). DOE-RL responded that the water goes to the SX pump and treat system building. EPA asked if that information was included in the ROD. DOE-RL responded that the end point for the water is included the revised interim ROD for UP-1, and the RD/RA work plan describes the water as a waste stream that will be coming to the SX pump and treat building.

200-BP-5 - EPA asked when the BP-5 and PO-1 feasibility studies (FS) are due. DOE-

RL responded that they are due in 2015. DOE-RL noted that the PO-1 remedial investigation (RI) report has been submitted to Ecology, and an addendum to the PO-1 RI will be submitted during the FS process. EPA requested that DOE-RL take a more strategic approach to any monitored natural attenuation (MNA) remedies for BP-5 and PO-1. DOE-RL noted that DOE and EPA headquarters are having a dialogue regarding MNA remedies. EPA stated that there is clear guidance, and there has never been enough structure to the RI/FSs to meet the criteria. EPA added that if a more strategic approach is not taken, the selected remedy will likely not be accepted and an interim action will be required. DOE-RL noted that an interim action will probably been done because of the issue of not fully evaluating all of the potential contaminant sources.

200-DV-1 - DOE-RL reported that the perched water removal system is continuing to extract water with a high concentrate of Tc-99 and uranium. The water is currently being sent to ETF, and efforts are under way to treat the water at the well head instead of sending it to ETF.

Soil and Groundwater Treatment Progress FY2012 - DOE-RL noted that the picture on page six of the handout is not associated with the chrome removal from the groundwater.

Milestone Summary - DOE-RL noted the four target milestone dates that were missed under M-015-00, but the goal is to meet the forecast dates for December 2012. Ecology stated that the four boreholes from the sampling and analysis plan (SAP) associated with M-015-110D are to be installed in September 2012. DOE-RL responded that the boreholes probably won't be installed in September because they fall below the line for funding. DOE-RL indicated that it will have further discussion with Ecology on the issue. Ecology acknowledged that the stimulus funding (ARRA) allowed for a large amount of wells to be drilled under M-024-00, and now that the stimulus has ended, there is very little funding for future well drilling. Ecology expressed the concern that there are operable units that will need wells drilled to meet permit requirements.

Planned Activities Next 6 Months:

200-ZP-1/200-PW-1 Soil Vapor Extraction (SVE) - EPA stated that sometime in the future the Tri-Parties need to hold a discussion about getting more aggressive on the SVE operations.

Tri-Party Agreement

Thursday, July 19, 2012
Ecology Offices, Conference Room 3A/B
3100 Port of Benton Blvd
Richland, Washington

Agenda

River Corridor/Central Plateau Milestone Review Meeting
Chairperson: JD Dowell

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-36	Life Cycle Report	Shannon Ortiz
9:20 a.m.	M-83	PFP Transition	Larry Romine
9:40 a.m.	M-26	Land Disposal Restrictions Report	Mike Collins
9:45 a.m.	M-91	Acquisition of Facilities to TSD TRU/TRUM and LLMW	Mike Collins
9:55 a.m.	M-16 and 85	Central Plateau Remediation	Al Farabee
10:05 a.m.	M-15, 16, 24, 37 and 85	Soil and Groundwater Remediation	John Morse
10:30 a.m.	Adjourn Milestone Review		

Tri-Party Agreement River Corridor/Central Plateau Milestone Review
July 19, 2012

Name	Organization
Terry Noland	MSA
Kathy Knox	Knox Court Reporting
JD Dowell	DOE RL
Jane Hedges	Ecology
Cheryl Whalen	Ecology
Stanley Cimon	O.D.O.E.
Nina Menard	Ecology
Donna Uyeda	WCH
Dennis Faulk	EPA
Mark French	RC
Larry Romano	DOE-RL
Rick Bond	Ecology
Rob Piper	MSA
JA Dowell	RL ORP

Tri-Party Agreement River Corridor/Central Plateau Milestone Review
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Name	Organization
JAMES LYNCH	DOE-ORP
DM Butler	MSA-PFM
Tiffany Nguyen	DOE RL
Tom Teymer	DOE-RL
Gordon Dover	WCH
[illegible]	[illegible]
Margo Vooge	DOE-RL
JOHN MORSE	DOE-RL
Rod Lobos	EPA
Melinda J Brown	Ecology
Lorna Dittmer	CHPRC
Michael Collins	DOE-RL
Shannon Ortiz	DOE-RL
Bob Long	"
James A Hansen	RL

RIVER CORRIDOR CLOSURE PROJECT *DOE's Largest Environmental Cleanup Closure Project*

TPA Quarterly Review

For Period: April - June 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

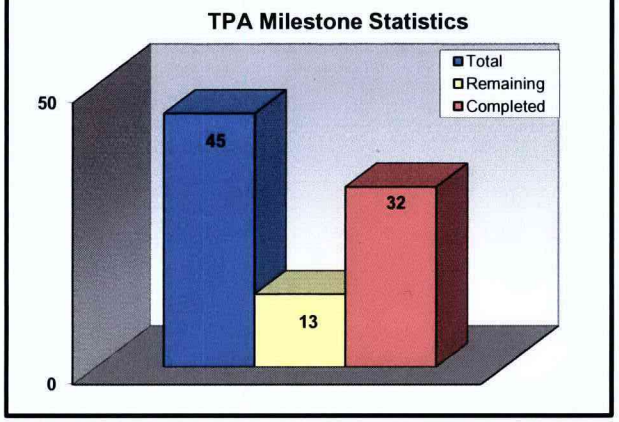
July 19, 2012

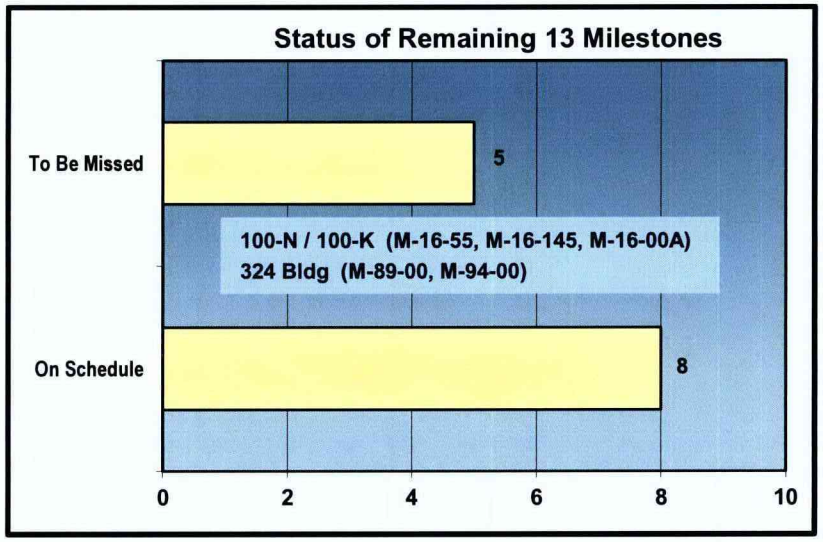
Protecting the Columbia River

E1012043

TPA Milestone Statistics
(Includes Target and Commitment Milestones)

Total	Remaining	Completed	Completed On	Completed Ahead
45	13	32	4	28





Quarterly Summary (April - June 2012)

- **Completed TPA Milestone:**
  -- M-94-08 – Complete Removal of 11 of 16 300 Area High Priority Facilities (due 6/30/12) – 6/25/12
- **Approved Change Request:**
  -- M-94-12-01 – Approved on 5/22/12; excluded backfill of 308 building. Backfill will be completed upon removal of TRIGA reactor.
- **Proposed Change Requests:**
  -- 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, M-16-55, and M-16-145).
  -- M-89-12-01 forwarded to regulators on 6/14/12 that proposed revised milestones and completion dates.

M-16 Milestones - Remedial Action (milestones through 12/31/2013)

TPA MS No.	Compliance Date	Title	Status	Comments
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	Preparing change request to propose extending completion of 100-N Area waste site remediation. The change will address interfering waste sites that have impeded performance in meeting the 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	To be missed	Unanticipated soil contamination encountered at 118-K-1. A change request is being prepared to address the schedule delays. 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, M-16-145, 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.

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. Draft change package was submitted to regulators on 6/14/12; RL initiated dispute on 7/5/12.
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	Completed	Completed on 6/25/12 - (307 Retention Basin, 308, 321, 323, 340B buildings)
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	
M-94-00	09/30/15	Complete Disposition of 300 Area Surplus Facilities Identified in the RAWPs for the 300 Area Facilities	To be missed	To be missed due to differing condition at 324 Complex. Draft change request M-89-12-01 was forwarded to the regulators on 6/14/12 that proposed revised milestones and completion dates.

Significant Accomplishments – For Last 3 Months:

M-16 – Remedial Action / Risk Assessment:

- Initiated PNNL groundwater sampling activities at 100-C-7:1.
- Resolved dispute on 100-H waste site documents.
- Completed loadout at 100-D-100 Tier 2; commenced loadout at 100-D-104, 100-D-77, and 100-D-30 (all Tier 2).
- Collected closeout samples at 100-F-57:2; demobilized subcontractor.
- Shipped most 118-K-1 anomalies to ERDF; demobilized subcontractor.
- Through June, excavated 416 drums; processed 272 from 618-10 Burial Ground.
- Received approval of 19 waste site closure documents during this reporting period.
- Issued Remedial Investigation of Hanford Site Releases to Columbia River, Screening Level Ecological Risk Assessment, Vol. 1, Rev. 0.
- Began shipping 618-10 concrete drums to ERDF.

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

- Continued infrastructure evaluations to maintain minimum safe operations of the 324 Complex.

M-93 – Reactors Final Disposition:

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

M-94 – 300 Area Surplus Facilities Disposition:

- Completed demolition/loadout of 300 Area designated buildings to satisfy completion of M-94-08.
- Completed 327 Phase II below-grade loadout.

100-C-7:1 – PNNL Water Sampling Operations

Completed 118-K-1 Anomaly Packaging

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

ERDF

- For period April-June, disposed ~ 679,000 tons of waste; bringing total to ~ 7,933,700 tons disposed since WCH assumed River Corridor cleanup responsibilities 8/27/05.
- Coordinating ERDF performance assessment with Tank Closure and Waste Management Environmental Impact Statement. Estimating DOE Low-Level Waste Disposal Facility Federal Review Group (LFRG) review beginning in December 2012.

Offloading Ion Exchange Module in ERDF

Significant Actions Planned – For Next 3 Months:

M-16 – Remedial Action / Risk Assessment:

- Develop path forward for 118-K-1 remediation alternatives.
- Initiate 100-N Area Phase II in-situ bioremediation construction.
- Complete Segment 5 miscellaneous restoration debris removal.
- Initiate development of Human Health Risk Assessment Report, Vol. II, Rev. 0 for Hanford Site releases to the Columbia River.
- Initiate development of 100-F Area transition and turnover package.

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

- Maintain min-safe conditions until path forward is determined for remediation of 300-296 waste site under B-Cell.

M-93 – Reactors Final Disposition:

- Complete remaining 105N/109N SSE workscope.

M-94 – 300 Area Surplus Facilities Disposition:

- Complete below-grade demolition/loadout of 336 High Bay Testing Facility.
- Complete removal of 309 Fuel Examination Cell.
- Complete below-grade demolition/loadout of 310 (TEDF).

ERDF

- Begin transportation and disposal of 618-10 concrete-lined drums.
- Receive 308A TRIGA reactor.

PERFORMANCE SUMMARY (includes ARRA)

Contract Inception (8/27/05) through June 2012

($K)

	IPB		CUMULATIVE			Previous Quarter Comparison			
						SCHEDULE VAR ($)		COST VAR ($)	
	BAC	EAC	BCWS	BCWP	ACWP	*Mar*	Jun	*Mar*	Jun
D4	569,003	531,445	459,334	493,932	408,033	*45,485*	34,598	*81,991*	85,899
Reactor ISS	75,883	80,677	73,955	73,290	76,601	*-6,195*	-665	*-616*	-3,311
Field Remediation	683,890	806,900	576,662	556,232	524,475	*-9,444*	-20,430	*44,891*	31,757
Waste Operations	530,117	438,006	364,168	471,303	358,525	*107,377*	107,135	*106,008*	112,778
ESFC	71,862	62,703	62,728	61,712	53,036	*-1,140*	-1,016	*8,787*	8,676
Mission/General Support	321,743	337,582	294,328	294,328	261,318	*0*	0	*35,878*	33,010
Transition	3,979	3,747	3,979	3,979	3,747	*0*	0	*232*	232
Contingency	53,355	53,355							
TARGET COST TOTAL	**2,309,831**	**2,314,413**	**1,835,154**	**1,954,777**	**1,685,736**	***136,082***	**119,623**	***277,171***	**269,040**

Schedule Variance (PMB): $119,623K

- 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 early completion of 618-11 infrastructure.
- 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): $269,040K

- 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 100-K and 300 Areas.
- 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 June 2012

($K)

	IPB		CUMULATIVE			Previous Quarter Comparison			
						SCHEDULE VAR ($)		COST VAR ($)	
	BAC	EAC	BCWS	BCWP	ACWP	*Mar*	Jun	*Mar*	Jun
RL0041.R1.2 - Cell 9 / ERDF	51,361	42,934	51,361	51,361	42,934	*0*	0	*6,932*	8,427
RL0041.R1.3 - Acc Rem / ERDF	59,737	45,331	59,737	59,737	45,331	*0*	0	*15,908*	14,406
RL0041.R1.4 - Cell 10	37,672	26,804	37,672	37,672	26,804	*0*	0	*10,869*	10,868
RL0041.R1.5 - Waste Ops	31,690	29,016	31,690	31,690	29,016	*0*	0	*3,574*	2,674
RL0041.R2 - 618-10	62,988	52,303	62,988	62,987	51,810	*0*	-1	*11,110*	11,177
RL0041.R3 - 618-10 Buyback	16,252	19,541	16,252	16,251	19,284	*-5,598*	-1	*-4,288*	-3,033
Contingency	1,018	1,018							
TARGET COST TOTAL	**260,718**	**216,946**	**259,700**	**259,698**	**215,178**	***-5,598***	**-2**	***44,105***	**44,520**

Schedule Variance (PMB): ($2K)

- N/A

Cost Variance (PMB): $44,520K

- 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 the original not-to-exceed budget being established too low.

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, closure of 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, and to address new remediation added via ESDs.

- **Issue**: As a result of encountering unanticipated soil contamination at 100-C-7:1, 118-K-1, and 100-D-30, waste site remediation will not be completed in time to meet the M-16-00A and M-16-145 milestones.
  Status: A draft change request has been developed to propose new completion dates for the sites, and to address new remediation added via ESDs and Fact Sheets.

RCC Issues

300 Area

- **Issue**: The radiological contamination encountered under the 324 facility will affect the schedule for demolition of the 324 complex. Additionally, sequencing of river corridor remediation has delayed procurement for the removal of the contaminated soil under the 324 B-Cell. Both issues affect completion of the M-89-00 milestone.
  Status: A change request that proposed delaying milestone completion was submitted to the regulators on June 14, 2012. DOE initiated dispute of the milestone on July 5, 2012.

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.

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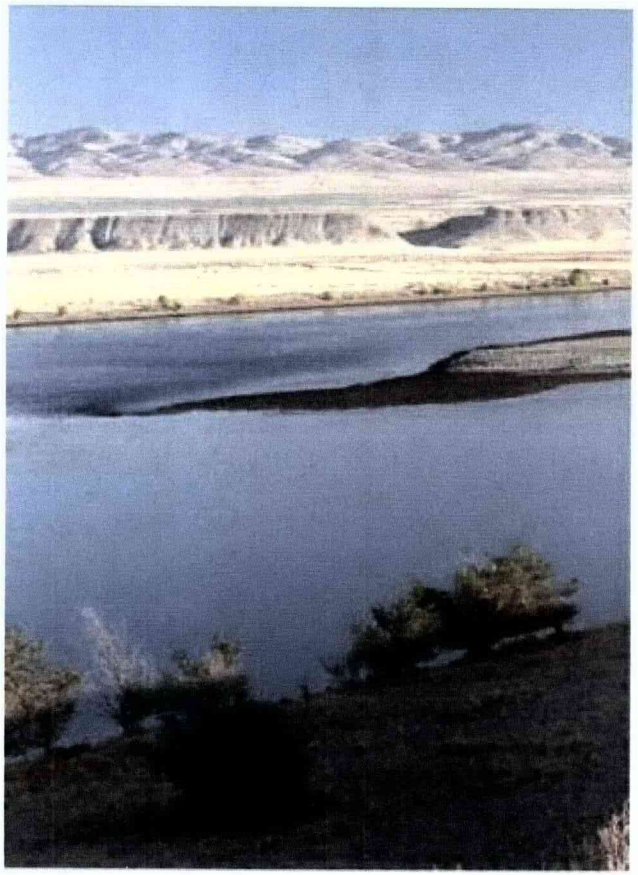

100-K Remediation Milestone Review

M-016 and M-093

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

Third Quarter FY2012
July 19, 2012

Tri-Party Agreement

U.S. DEPARTMENT OF ENERGY

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Accomplishments – 3rd Quarter 2012

D4

- Continued 105-KE Interim Safe Storage (ISS) activities
- Continued demolition of the 183.2KE Sedimentation Basin
- Completed demolition of the 182K structure
- Continued demolition preparation activities for the 183.7 Pipe Tunnel
- Began the demolition of the 105-KE Water Tunnel

105-KE Water Tunnel Demo

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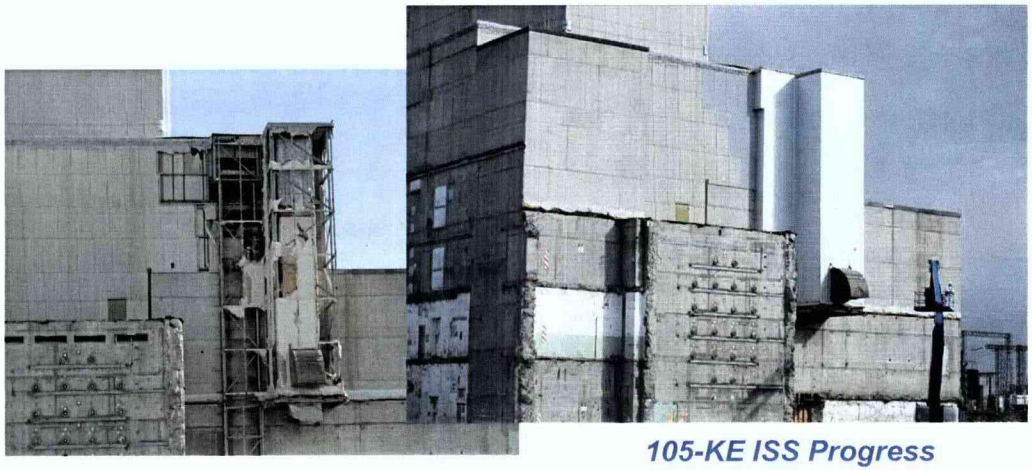
Accomplishments – 3rd Quarter 2012

KE Reactor Interim Safe Storage

- Approved the Final Hazard Categorization and released the Final Design Report
- Completed repair to the above grade reactor building openings
- Completed cleanout of hazardous and combustible materials on the ground floor of the reactor building, and completed 50% of hazardous and combustible materials overall
- Began construction of below-grade concrete pourbacks



105-KE ISS Progress

105-KE ISS Pourback

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Accomplishments – 3rd Quarter 2012

Waste Sites

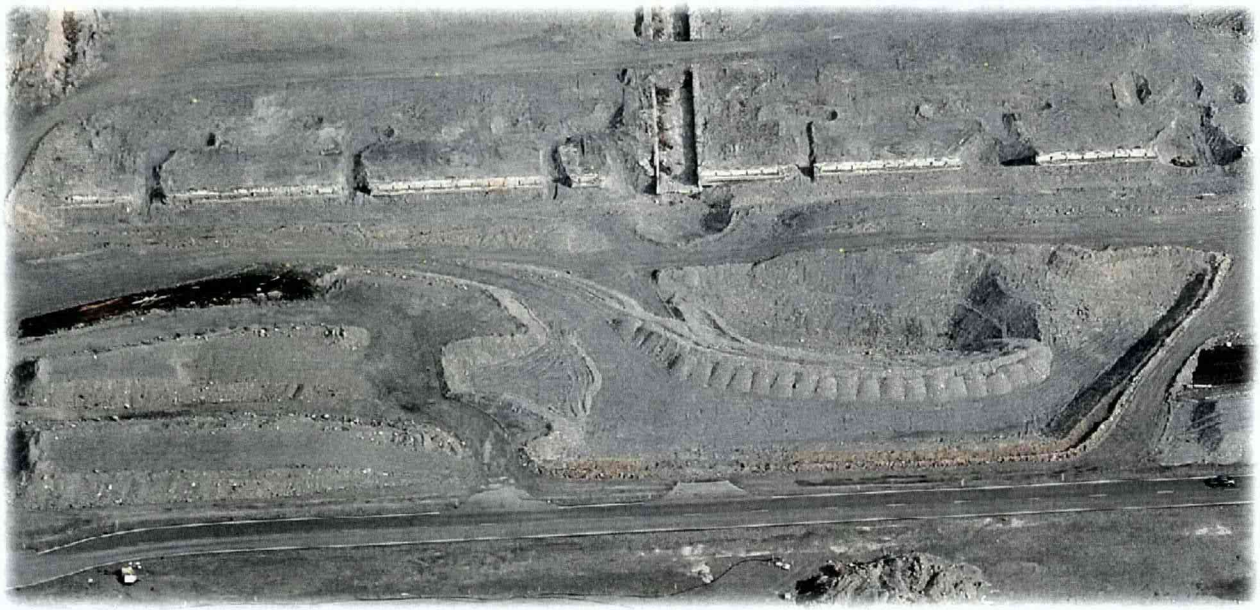
- Completed the remediation of waste sites 100-K-3, 100-K-68, 100-K-69, 100-K-70 and 100-K-71 (Area AG Zone 1); the Verification Sample Instruction was sent to DOE-RL and EPA for review.
- The Verification Sampling Instruction for Area AG Zone 2 was approved by DOE-RL and EPA, sample collection is scheduled to start July 9.
- The RSVPs for Area AH and 100-K-53 are being drafted.
- The RSVP for 100-K-63 is being revised to incorporate comments.

105KE Area Waste Site Remediation

Accomplishments – 3rd Quarter 2012

Waste Sites (con't)

- The RSVP for Area AA Zone 2 was approved, interim closing waste sites 100-K-18, 100-K-19, 100-K-97, 120-KW-5 and 120-KW-7.
- Initiated backfill of Area AA Zone2.
- The Draft A RSVP for Area AA Zone 1 was provided to EPA for review, as documentation for the interim closure of waste sites 100-K-102, 1607-K3, &100-K-34.

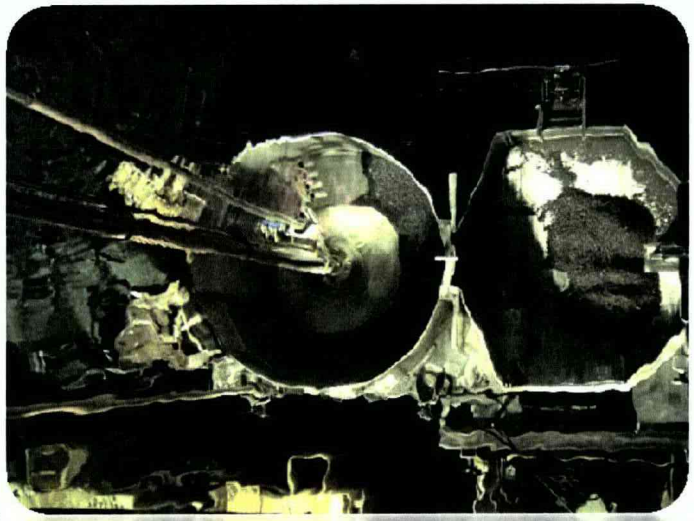


KW Headhouse Area Waste Site Remediation

Accomplishments – 3rd Quarter 2012

Sludge Treatment Project – Removal of KOP Material (M-016-172, due 9/30/12)

- **Knockout Pot (KOP) Material Processing System**
  - Completed removing the last of the "found fuel" and burial ground fuel from the 105 K West (KW) Basin as precursor for removing KOP material.
  - Completed installation of the KOP material processing system (KPS) in the KW Basin.
  - Completed readiness activities in support of removal of KOP product material.
  - Received final shipment of MCO copper inserts that will be filled with KOP product material.
  - Commenced KOP material processing operations including the loading of Multi-Canister Overpacks (MCOs) baskets with copper inserts containing KOP product material for removal from the KW Basin.



KPS Processing

Accomplishments – 3rd Quarter 2012

Sludge Treatment Project Phase 1- Removal of Containerized Sludge

- **Sludge retrieval and transfer system design (M-016-174, due 9/30/13)**
  - Awarded contract for the construction of the KW Basin Annex Building and building systems to be used for the removal of sludge in the KW West Basin.
  - Continued optimization testing on mock up sludge retrieval and transfer system and components at the Maintenance and Storage Facility (MASF)
  - Completed sample analysis of KW Basin floor and pit sludge (Engineered Container 210). Data verification is complete and data validation currently in progress.
  - Completed ECRTS Technology Readiness Assessment
  - Completed site civil work associated with rerouting utilities and roads in preparation for the construction of the KW Basin Annex Building.
  - Completed cultural and ecological recourse reviews associated with excavations for the KW Basin Annex Building and construction of the same.
  - Planned and scheduled environmental documentation needs for sludge storage at T Plant.

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 June 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	179.0	178.0	180.0	-1.0	-1.9	179.7	181.4	-1.6	0.99	0.99
Base	99.6	96.9	85.1	-2.7	11.8	337.3	324.8	12.5	0.97	1.14
Total	**278.6**	**274.9**	**265.0**	**-3.7**	**9.9**	**517.0**	**506.1**	**10.9**	**0.99**	**1.04**

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	**307.4**	**304.3**	**308.9**	**-3.1**	**-4.6**	**532.2**	**536.1**	**-2.7**	**0.99**	**0.98**

Numbers are rounded to the nearest $0.1M.

Tri-Party Agreement

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Planned Activities

Next 6 months

RL41: D&D / Soil Remediation

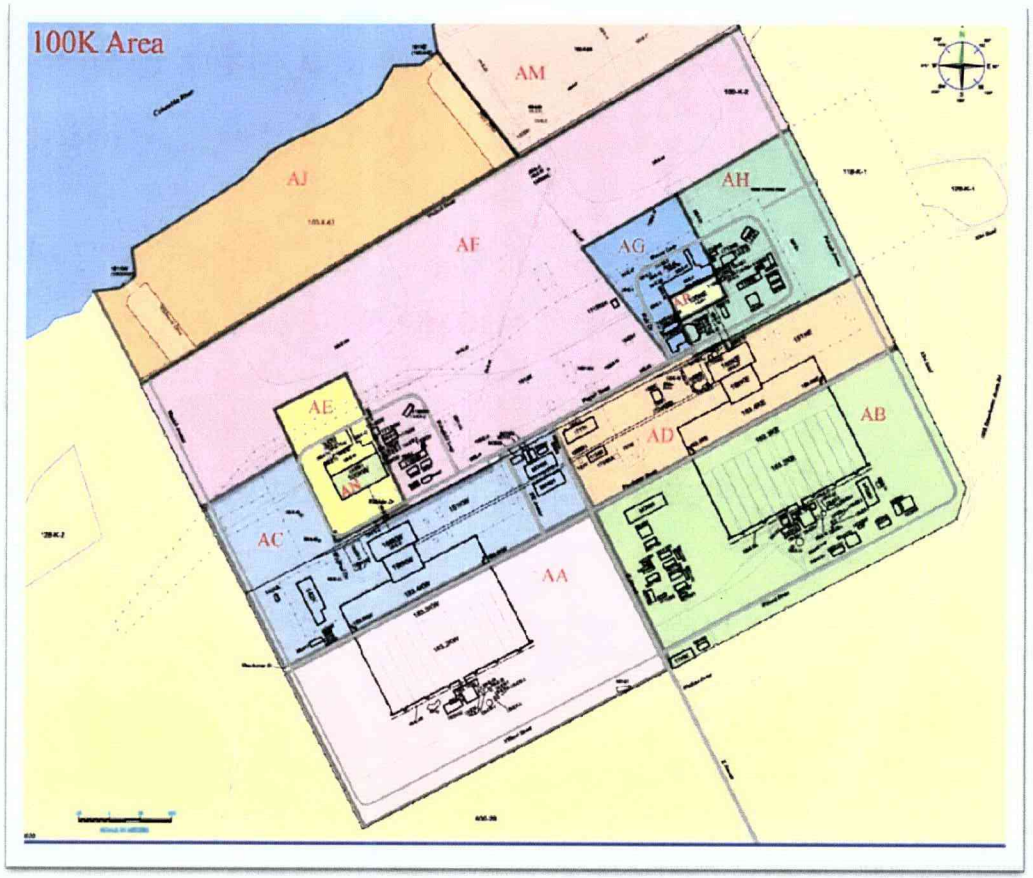
- **D4 Scope**
  - 190KW Main Pump House - Complete demobilization
  - 183.2KE Sedimentation Basin – Continue demolition and load out.
  - 183.7KE Tunnel – Complete demolition and load out
  - 105KE Water Tunnel – Complete demolition and load out
  - Backfill structures as funding permits

- **105KE Reactor ISS**
  - Implement FHC
  - Complete below-grade pourbacks
  - Complete clean out of hazardous and combustible materials
  - Award contract for SSE construction
  - Begin backfill and compaction for SSE foundation construction

Planned Activities

Next 6 months

- **Waste Site Remediation – Areas AA, AG, AH, AJ**
  - Area AA – Complete waste site closure, backfill and stabilize/revegetate
  - Area AG – Complete verification sampling, waste site closure, backfill and stabilize/revegetate
  - Area AH – Complete waste site closure, backfill and stabilize/revegetate
  - Area AJ – Revising completion documentation for 100-K-63; backfill and revegetation complete
- **M-016-53 - Complete Phase 1 Response Action for 100K,** ***due December 31, 2012; on schedule***



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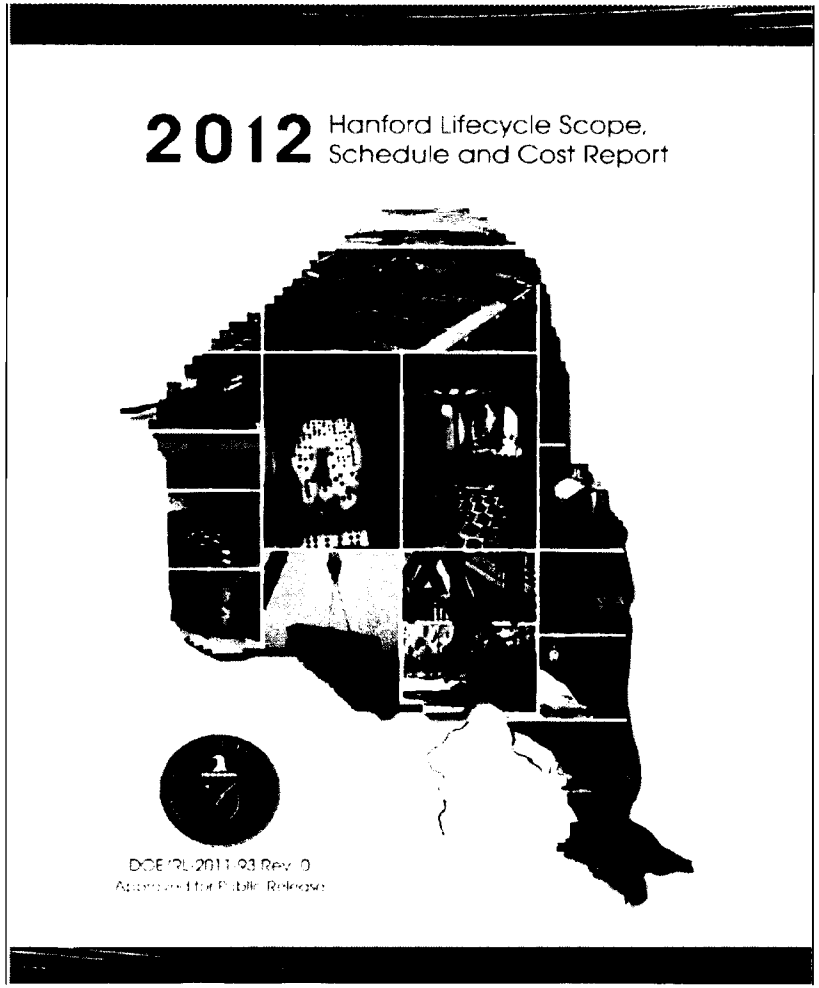
Planned Activities

Next 6 months

RL12: Sludge Treatment Project

- **KW Basin Annex Building and Building Systems**
  - Submit RDR to EPA for approval associated with the design of the KW Basin Annex Building and building support systems.
  - Complete site excavation and foundation construction of the KW Basin Annex Building.
- **Engineered Container Retrieval and Transfer System**
  - Complete final design and testing of the ECRTS *(M-016-174, due 9/30/13).*
- **K West Basin Knock Out Pot Material Removal**
  - Complete removal of KOP material from the KW Basin *(M-016-172, due 9/30/12).*
  - Plan for the shutdown of the Cold Vacuum Drying Facility and transition of that facility into a surveillance and maintenance mode after processing of the KOP material and transfer to the Canister Storage Building is complete.



Hanford Lifecycle Scope, Schedule and Cost Report

TPA Milestone: M-036-01C

Quarterly Performance Report

April - June, 2012

Stephen Korenkiewicz, DOE-RL

Lifecycle Report Project Manager

Presented by Shannon Ortiz, DOE-RL

In-Party Agreement

U.S. DEPARTMENT OF ENERGY

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.

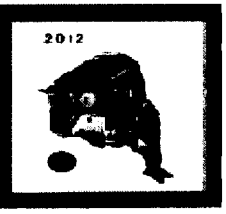
2. The initial 2011 Hanford Lifecycle Scope, Schedule and Cost Report (Lifecycle Report) was submitted July 25, 2011, and subsequent reports are due January 31 of each year.

RL PROGRAM MANAGERS' ASSESSMENT OF CONTRACTOR PERFORMANCE

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 2013 Lifecycle Report.

SIGNIFICANT ACCOMPLISHMENTS FOR THE LAST THREE MONTHS



1. The public review period for the 2012 Lifecycle Report began February 6, 2012, and concluded on April 13, 2012. Comments were received from EPA, Ecology, and one member of the public.
2. The written feedback received on the 2011 and 2012 Lifecycle Reports was reviewed at a meeting with the Tri-Party Agencies on May 17, 2012.
3. All feedback received was posted on the DOE-RL Website (www.Hanford.Gov).

SIGNIFICANT PLANNED ACTIONS FOR THE NEXT SIX MONTHS

1. Continue work on the scope, schedule and cost requirements for producing the 2013 Lifecycle Report, including development of the alternatives analysis.

2. The alternatives analysis will present the DOE planning case and basis of estimate for cleanup of waste sites in four Central Plateau operable units: 200-CW-1, 200-CW-3, 200-OA-1, and 200-WA-1.

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.

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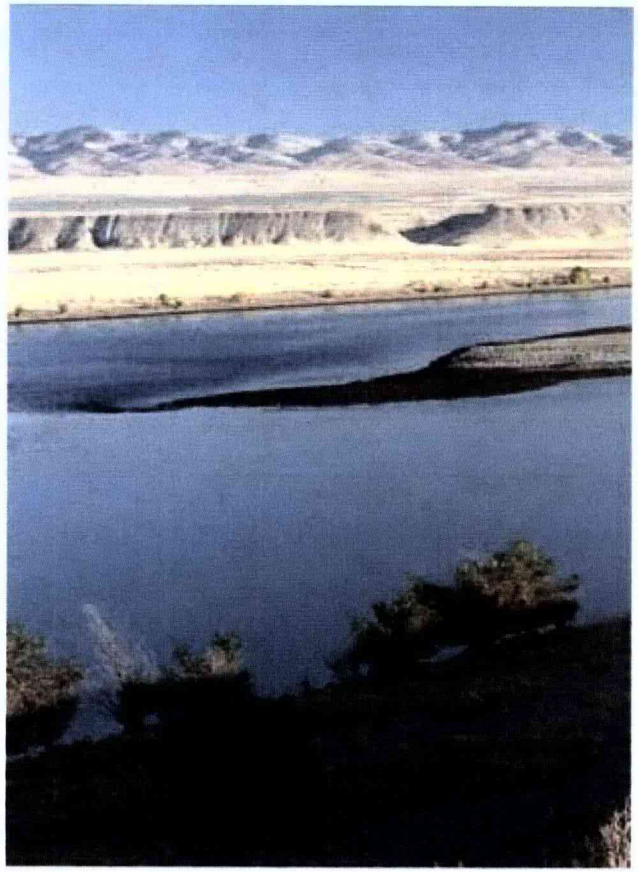


PFP Closure Project

TPA Milestone: M-083

Tri-Party Agreement

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

3rd Quarter 2012
July 19, 2012

U.S. DEPARTMENT OF ENERGY

One Culture. One Team.

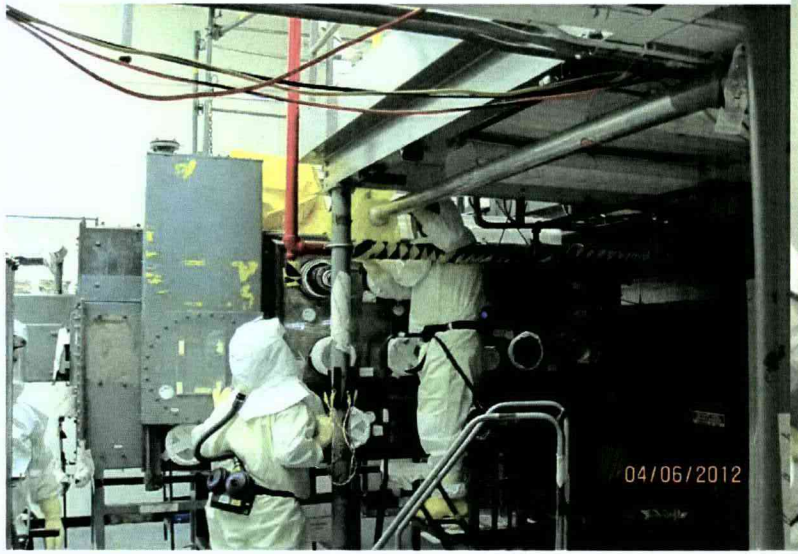
Quarterly Milestone Summary

(April – June 2012)

TPA Milestone	Due Date	Status	Milestone Description
M-083-24	06/30/12	Complete	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 – 3rd Quarter

- Completed removal of 176 of 238 Gloveboxes (74%)
- Continued RMA/RMC Glovebox deactivation activities; seven gloveboxes removed in last 3 months
- Completed size reduction of 10 more pencil tank units for a total of 90 thru 06/25/12. 106 remaining.



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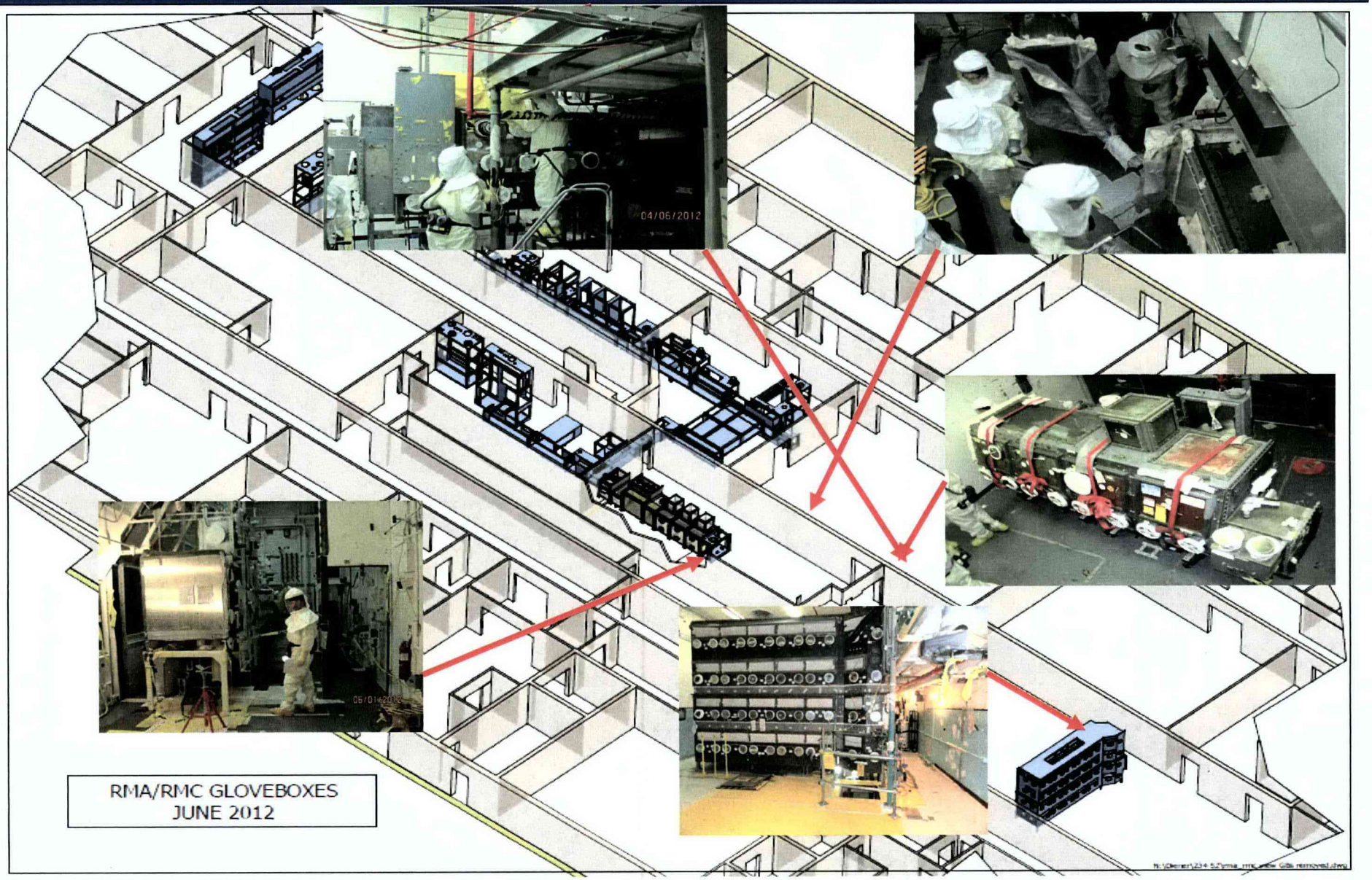
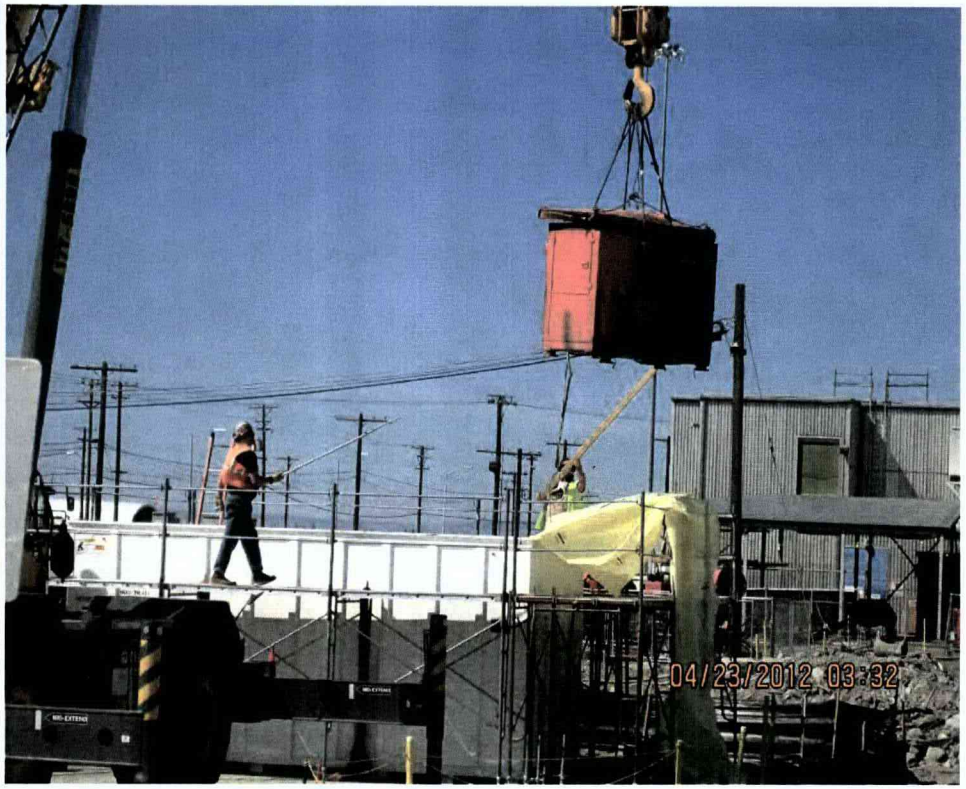
Accomplishments – 3rd Quarter Cont'd:



Accomplishments – 3rd Quarter Cont'd:

- 2736-Z/ZB Vault Storage Complex Facilities Demolition Complete!



Removal of Last of the Contaminated and Hazardous Waste

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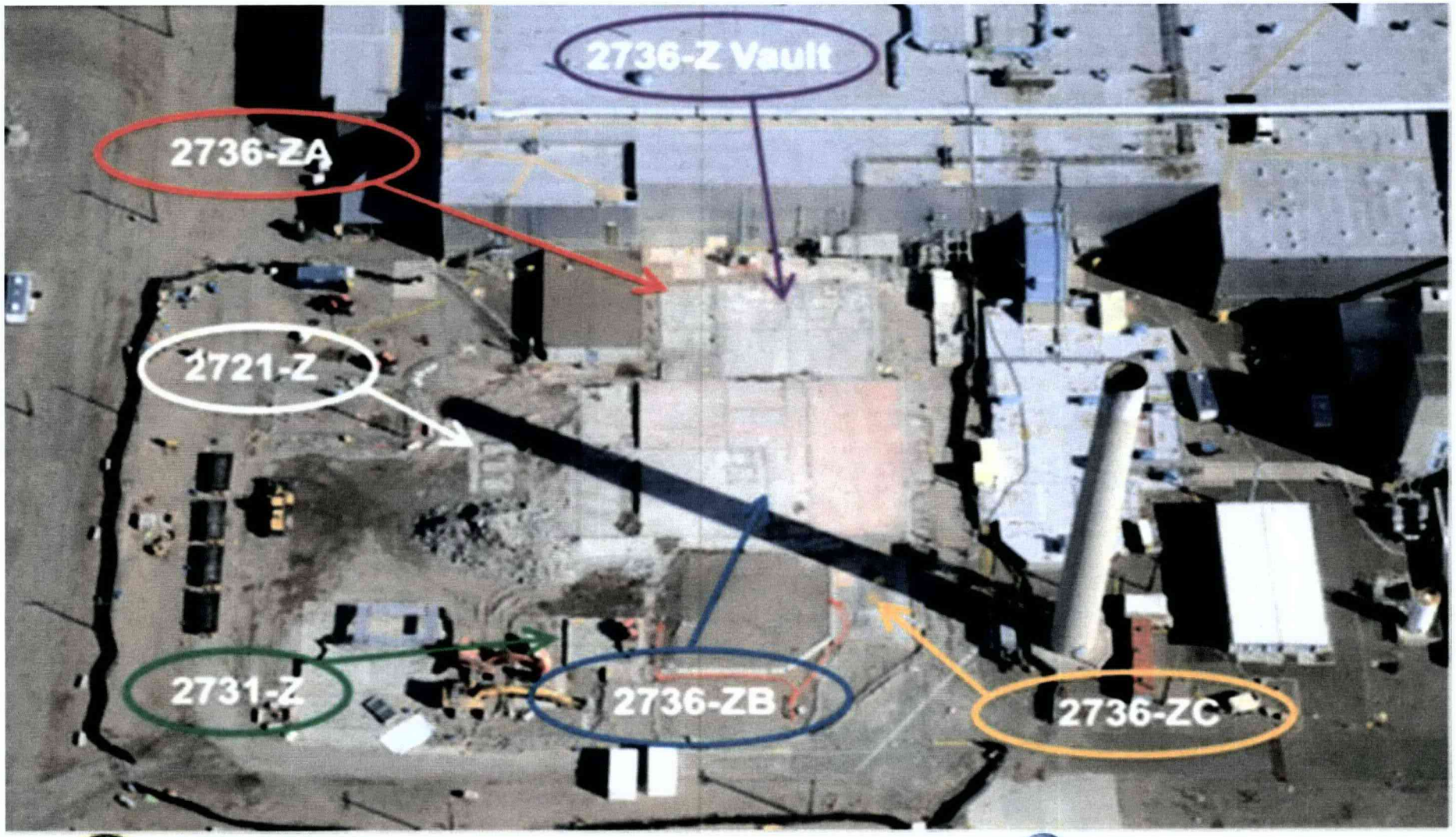
Accomplishments – 3rd Quarter
Cont'd: Vault Complex Demo Complete



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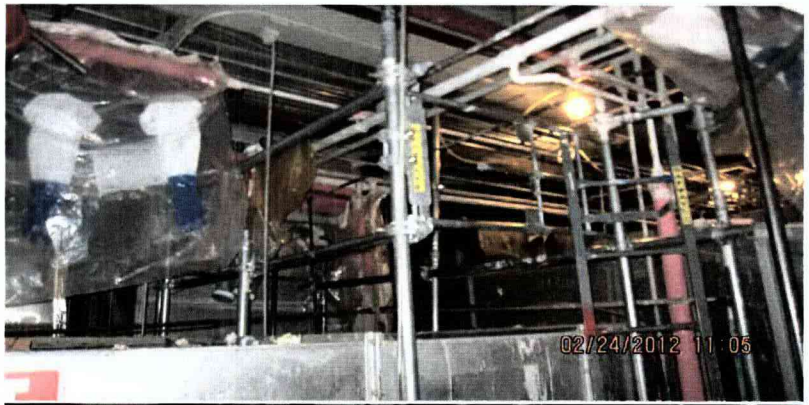
Accomplishments – 3rd Quarter Cont'd:

- Continued NDA on tunnel drain lines & Asbestos Insulation Removal (68%; 16,393 of 24,000).

Continued NDA Progress on Tunnel Drain Lines



Access via scaffolding is critical to success for all duct level scope

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Accomplishments – 3rd Quarter Cont'd:

- Continued disposition of Process Vacuum System Piping (24%; 1,558 of 6,436 ft.)

Removal of Hydrogen Fluoride Detector

Size Reduction of Piping

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Accomplishments – 3rd Quarter Cont'd:

- Performed required min-safe inspections, surveillances and maintenance activities

- 291-Z Ventilation Exhaust Fans
  - Completed EF-5 weld repairs.
  - Replaced the motor on EF-7
  - Replaced and torqued bearing bolts on EF-2, 4, 6, &7.
  - Installed new belt and sheave on EF-6
  - Continued weekly fan vibration and thermal monitoring
  - Completed vibration testing of ET-8 & 9.

Maintaining Critical Systems during D&D

Project Baseline Performance

Contract to-Date (through June 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	$503,359	$498,719	$511,811	($4640)	-0.9%	($13,092)	-2.6%	$891,858	$913,108	($21,250)
ARRA	$289,766	$284,278	$293,778	($5,488)	-1.9%	($9,500)	-3.3%	$289,766	$298,728	($8,962)
Base	$213,593	$214,482	$218,033	$849	0.4%	($3,592)	-1.7%	$602,092	$614,380	($12,288)

Numbers are rounded to the nearest $K.

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Value Engineering/7Sigma Initiatives

- Five major initiatives under way
  - 3 major initiatives being implemented
    - SLB-2 – larger waste boxes
    - Tool Time – goal is 'actual entries = available entries'
    - Remove TRU Whole - eliminated size reduction facility in 234-5 (Phase 1)
  - 2 initiatives under further analysis
    - Remove TRU Whole (Phase 2) – expanded application
    - Immobilize – initial focus is 242-Z total grouting
    - Size reduction and/or storage at other facilities (e.g., CWC)

Issues/Challenges

Regulatory Issues:

- None

Non-Regulatory Issues:

- Remaining gloveboxes are significantly more difficult to remove than planned.
- Equipment failures associated with aging building systems/components (e.g. PRF crane, exhaust fans) impacting D&D
- Utilization of current resources/staff productivity
- Work package development to ensure timeliness, quality & backlog
- Staff retention; layoffs/bump and roll
- FY-13/14 Budgets to sustain PMB
- Continue efforts to identify alternate approaches to achieve efficiencies and cost & schedule savings (achieve VE goals)
- Open Air Demo vs. Containment Structure

Planned Activities

Next 3 months

Disposition Solid Waste

- Implementation of loading SLB2s inside 234-5Z
- Load & ship glovebox HC-2A, HC-2B, and HC-2C in TYPE A shipping container to PFNW for size reduction
- Ship Pencil Tank #19 waste containers
- Implement TRU glovebox shipments to the Solid waste Operations Complex for storage and processing as part of VE Breakthrough Initiative 3
  - Load & ship glovebox HC-21A in TYPE A shipping container

234-5Z RMA/RMC Lines

- Remove gloveboxes HA-8A, HA-8B, and HC-12S
- Complete the HA-23S mockup activities (at 2610E)
- Complete bulk area cleanout for Rooms 230A and 230B
- Continue asbestos abatement and process vacuum line removal

Planned Activities

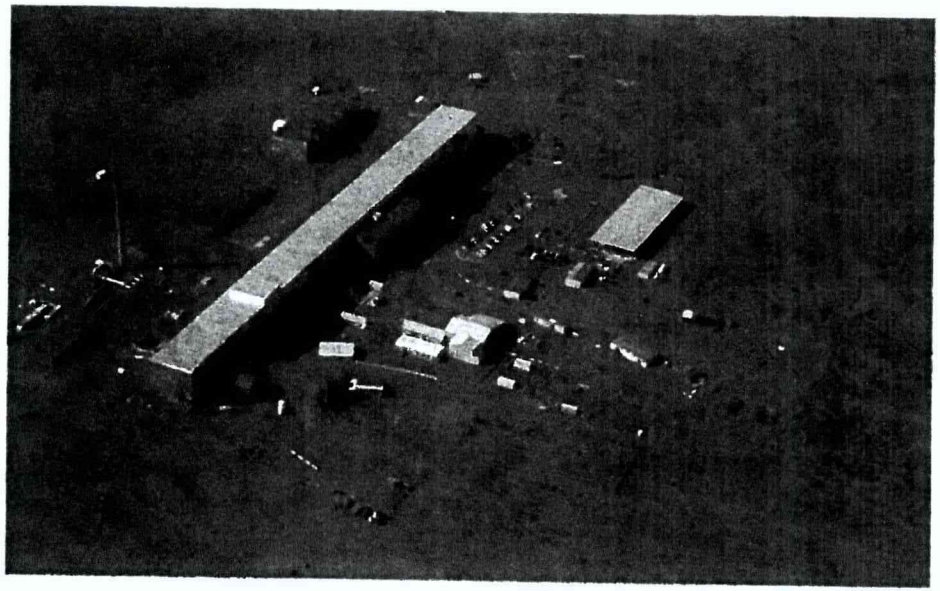
Next 3 months Cont'd:

236-Z Plutonium Reclamation Facility

- Pencil Tank Size Reduction: Repair Canyon Crane and 99 9 size reduction of Pencil Tank Assembly 39.
- Gallery Gloveboxes: Continue equipment removal from east gallery gloveboxes.
- MT Gloveboxes: Complete field work for the MT-1 and MT-3 mechanical isolation.
- Column Gloveboxes:
  - Complete removal of the service piping interferences around the criticality drains and column gloveboxes.
  - Issue work package and initiate field work for removal of the mercury and associated lines in Room 60.

Department of Energy – Richland Operations Office

Tri-Party Agreement Quarterly Milestone Review M-91/M-26



July 19, 2012

EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Status for the Last Three Months

- M-091-03 Project Management Plan - Annual submission made 06/12/12
- M-091-40 Retrievably Stored Waste (CH) – Target: Retrieve 250 m^3 by 09/30/12
  - No waste retrieved
  - 2015/2016 milestones at risk
- M-091-41 Retrievably Stored Waste (RH) – Complete non-caisson retrieval by 09/30/16
  - No waste retrieved
  - 2016 milestone at risk

Status for the Last Three Months

- M-091-42 MLLW (CH, small container) – Complete treatment by 09/30/17
  - No waste treated
  - 10 m^3 in aboveground storage
  - 2017 milestone at risk
- M-091-43 MLLW (RH and large container) – Complete treatment by 09/30/17
  - No waste treated
  - 58 m^3 in aboveground storage
  - 2017 milestone at risk

Status for the Last Three Months

- M-091-44 TRUM Waste (RH and large container) – Certify 300 m^3 by 09/30/18
  - No waste repackaged into a WIPP-certifiable waste form
  - 9,960 m^3 in aboveground storage (includes M-091-46 TRUM waste and TRU waste)
- M-091-46 TRUM waste (CH, small container) – Target: Certify 300 m^3 by 09/30/12
  - No waste repackaged into a certifiable waste form
  - 2016/2017 milestones at risk

Status for the Last Three Months

- Non-TPA – DOE-EM 90% TRU Waste Disposition Goal – Hanford Contribution
  - No waste dispositioned
  - Starting – 16,553 m^3, remaining – 11,146 m^3

Status for the Last Three Months

- M-026-01 Land Disposal Restrictions Report – Annual Summary Report being reviewed by Ecology

Fiscal Year 2012 (through June 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	8,058.7	8,058.7	7,179.9	0.0%	10.9%
Waste Receiving and Packaging Facility (WRAP)	2,074.8	2,074.9	3,473.2	0.0%	-67.4%
T Plant	6,551.9	6,551.9	5,881.5	0.0%	10.2%
MLLW Treatment	50.3	1,400.0	1,250.1	2683.2%	10.7%
TRU Waste Retrieval	283.0	626.9	180.5	121.5%	71.2%
TRU Waste Repackaging	1,770.2	1,868.2	2,758.8	5.5%	-47.7%
TRU Waste Disposition	0.0	0.0	4.8	0.0%	0.0%
Project Management	9,391.7	9,391.7	8,611.7	0.0%	8.3%

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.

Actions Planned for Next Six Months

- M-026-01 – Complete 2012 Land Disposal Restrictions Report
- M-091-03 – Complete 2012 Project Management Plan
- 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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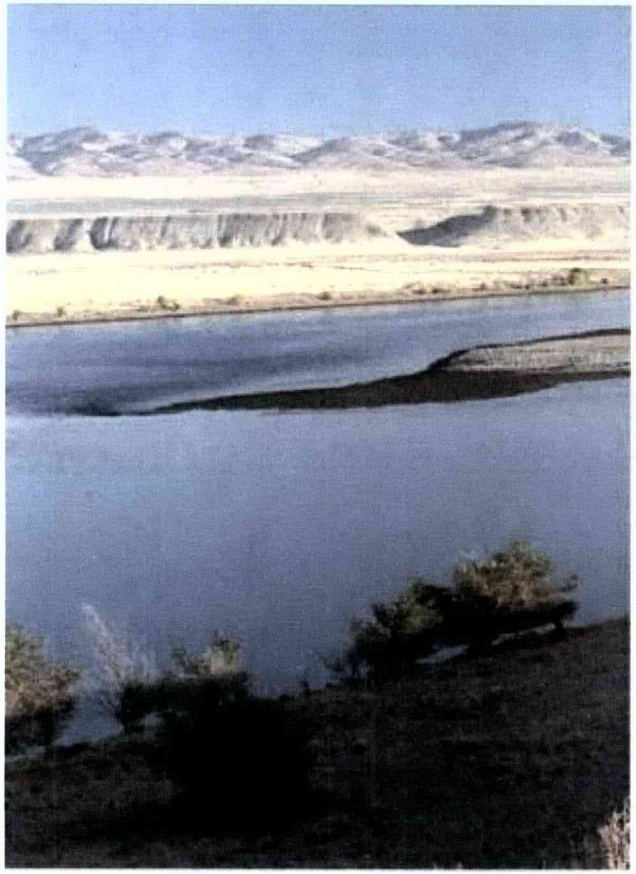

Central Plateau Remediation Project Milestone Review

M-016-00, M-085-00

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

Third Quarter FY2012
July 19, 2012

Tri-Party Agreement

U.S. DEPARTMENT OF ENERGY

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Accomplishments – 3rd Quarter 2012

Completed TPA Milestones:

- None during 3rd Quarter 2012

Asbestos Abatement

- BCR approved and abatement work initiated for identified sections of damaged steam lines in 200W

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Milestone Status

TPA Milestone Number	Milestone Due Date	Milestone Title	Status
M-085-00 – 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 (excludes U Plant and T Plant)			
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 – 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

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Project Baseline Performance

Contract to date (Through June 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	199.4	193.6	-0.1	0.0	5.8	2.9	199.4	193.5	5.8
Outer Zone	84.3	84.3	71.7	0.0	0.0	12.6	15.0	84.3	71.7	12.6
Asbestos Abatement	0.0	.8	.4	.7	1665.0	.4	51.1	1.8	1.9	-0.1
ARRA Total	283.7	284.4	265.6	0.7	0.3	18.8	6.6	285.5	267.1	18.4
Base	76.4	76.3	69.0	-0.2	-0.2	7.3	9.6	363.0	356.2	6.8
Total	360.1	360.7	334.6	0.5	0.2	26.1	7.2	648.5	623.3	25.2

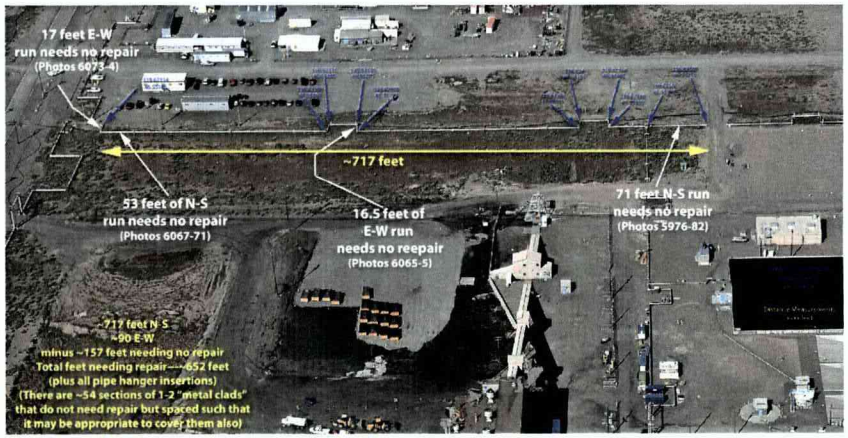
Numbers are rounded to the nearest $0.1M.

Planned Activities

Next 6 months

Asbestos Abatement

- Abatement of identified sections of damaged steam lines in 200W will continue



Remainder of Central Plateau work is in a Minimum Safe Configuration

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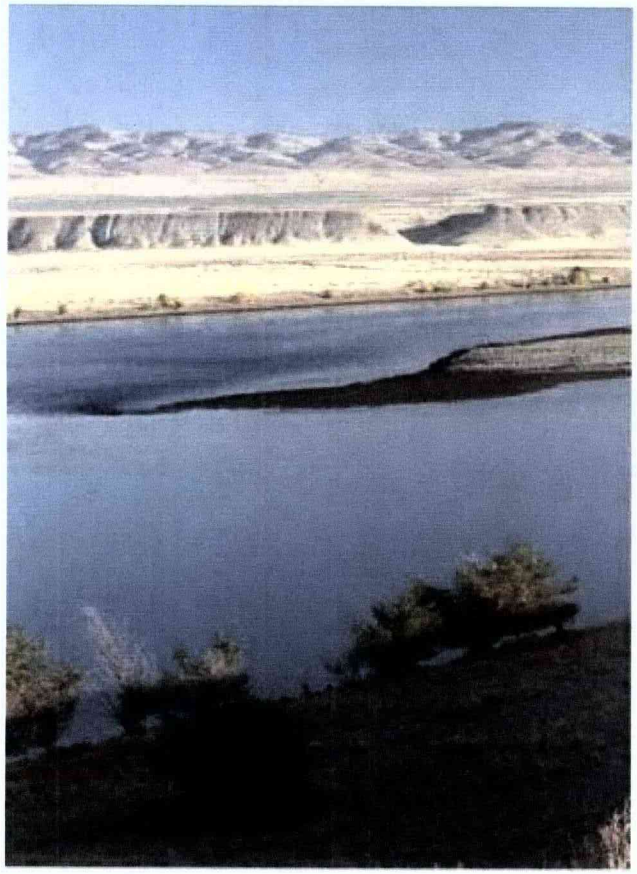

Soil and Groundwater Remediation Project Milestone Review

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

Third Quarter FY2012
July 19, 2012

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Accomplishments – 3rd Quarter 2012

Completed TPA Milestone M-015-110D; *Submit Tc-99 Pilot Scale Treatability Study Test Report as an element of RI for 200-WA-1 to EPA (Desiccation Test Report)*, due June 30, 2012. (completed June 20, 2012)

Pump and Treat Operations

- Treated 291.7 million gallons of groundwater
- Removed 194.2 kg of contaminants from the groundwater

Sampling

- 3,330 samples collected
- 7,093 analyses performed

200 West Area Groundwater Treatment Facility

- Completed all Acceptance Test Procedures (ATPs) (23 of 23 complete) as of June 22, 2012.
- The Integrated Acceptance Test Procedure (IATP) field checks started on April 30, 2012 and was completed on June 25, 2012.
- Turnover to operations was successful on June 28, 2012.

Accomplishments – 3rd Quarter 2012

200-UP-1

- Construction and ATP of the S-SX extraction system was completed. Scheduled system startup is planned for August 2012 *(M-016-120, due 8/31/12).*

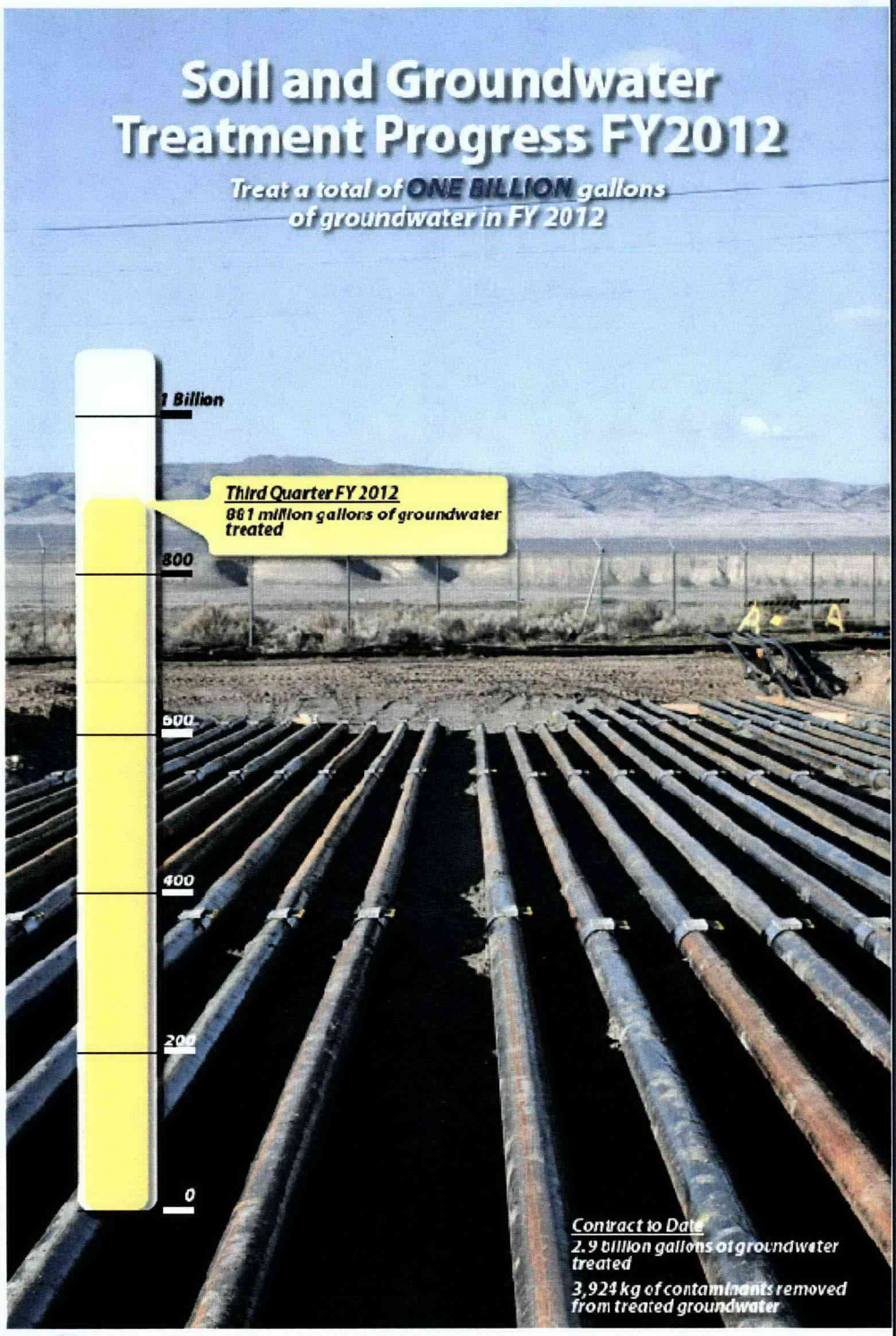
200-BP-5

- Treatability test construction was completed and layed up. The Operating Procedure was approved and the system is ready to operate when funding becomes available.

200-DV-1

- The B Area perched water removal system continues to operate at a rate of approximately 2,100 gallons per week. Through the end of June, about 41,825 gallons of effluent have been removed from the perched water zone this fiscal year.

FY2012 Progress



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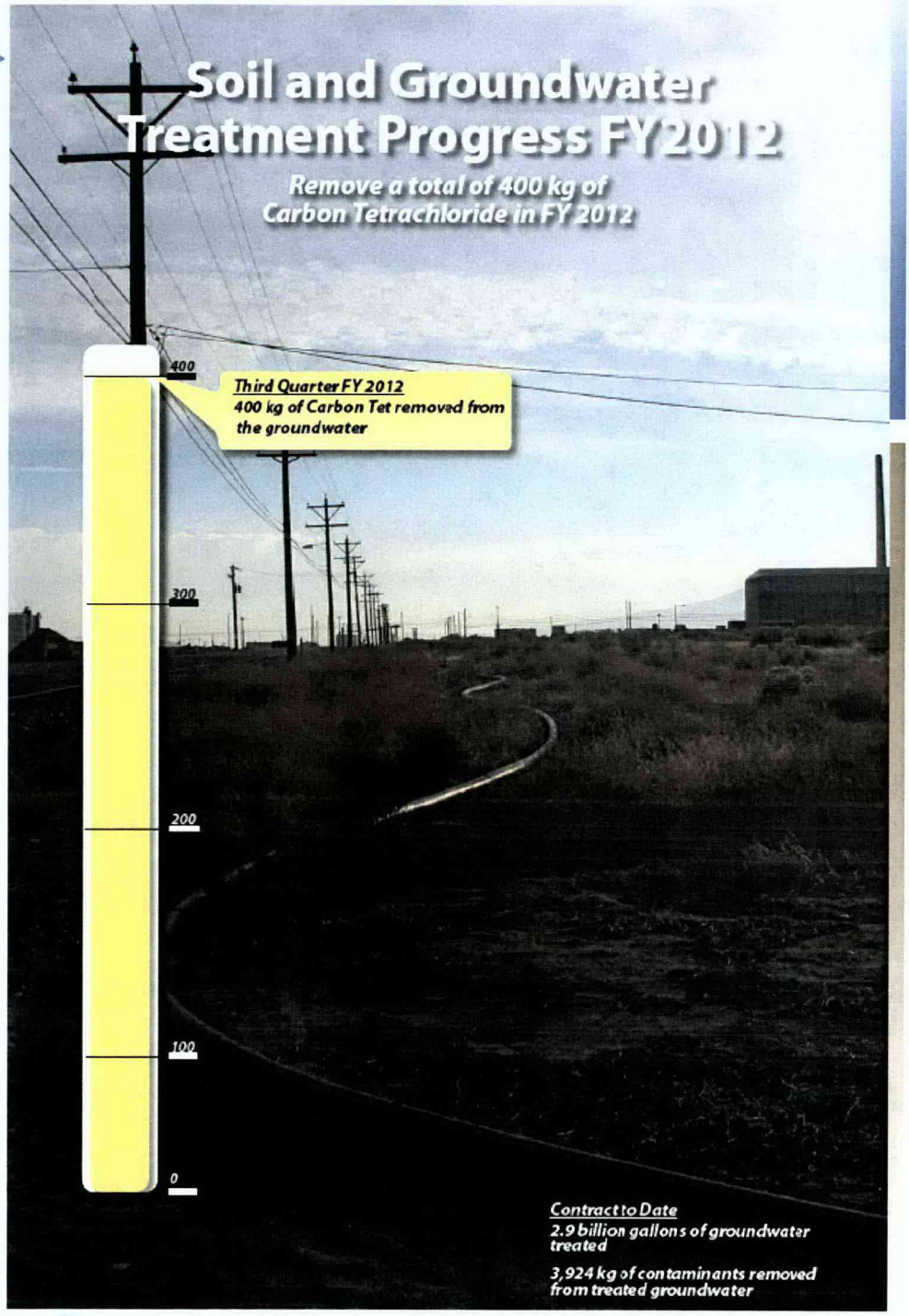
FY2012 Progress



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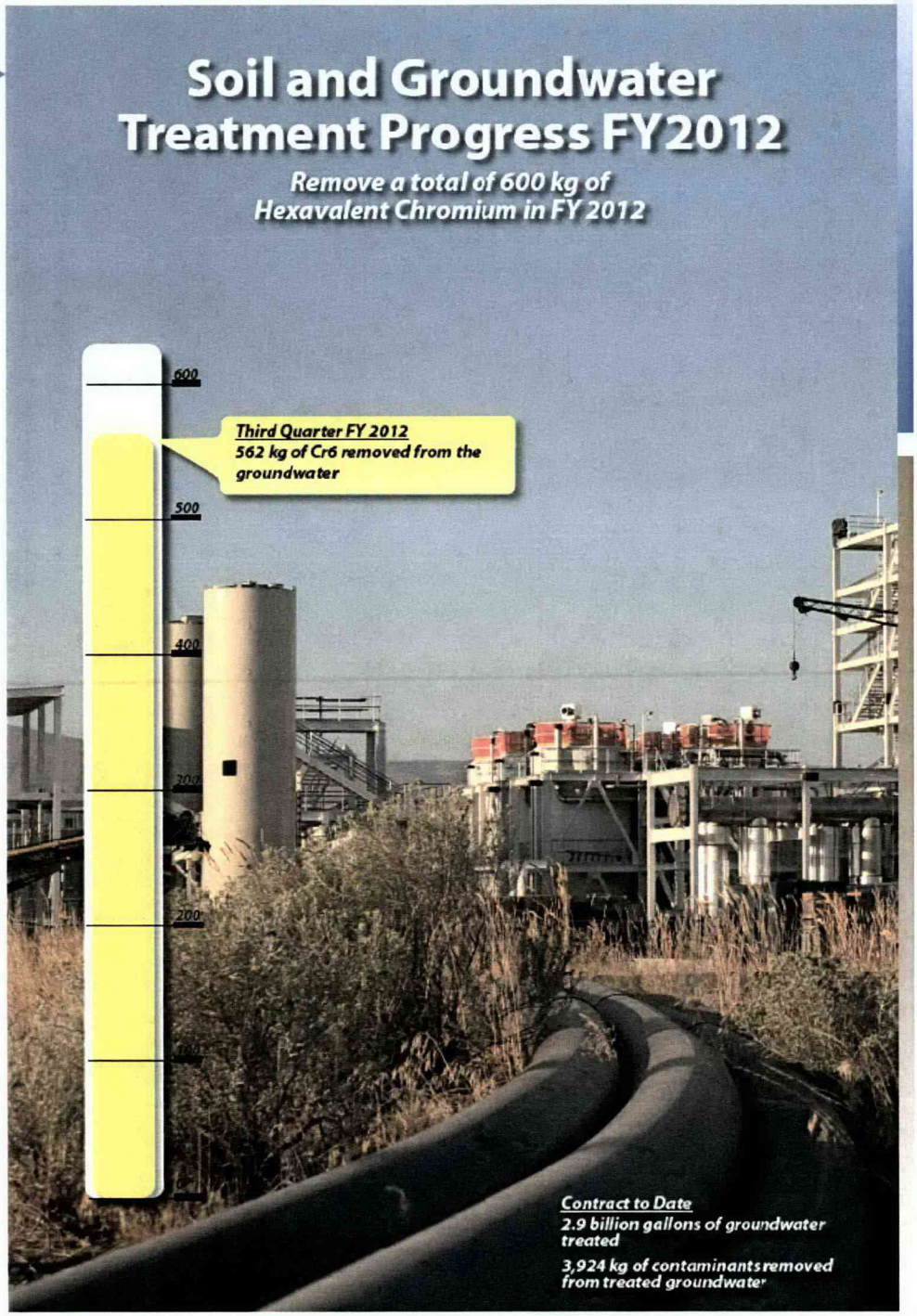
FY2012 Progress



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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: 12/14/2012) 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: 12/28/2012) 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: 12/28/2012) Submit RI/FS Report and PP for 100-FR-1/2/3 and 100-IU-2/6	Missed
M-015-110D	06/30/12	(Transmitted to EPA on 6/20/2012) Submit Tc-99 Pilot Scale Treatability Study Test Report as an element of RI for 200-WA-1 to EPA (Desiccation Test Report)	**COMPLETE**
M-015-62-T01	09/17/12	(Project Forecast Date: 12/28/2012) Submit FS/PP for 100-NR-1/2 OUs Including GW and Soil	To Be Missed
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.

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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	**COMPLETE**
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.

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Project Baseline Performance

Through May 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	70.5	70.5	77.7	0.0	0.0	-7.2	-10.1	73.4	82.6	-9.2
ARRA RL-0030.R1.1 Cleanup Operations	175.0	175.0	174.8	0.0	0.0	0.2	0.1	175.0	174.9	0.0
ARRA RL-0030.R1.2 Well Drilling Operations	40.7	40.7	38.4	0.0	0.0	2.4	5.8	40.7	38.4	2.4
Subtotal RL-0030.C	286.3	286.3	290.9	0.0	0.0	-4.6	-1.6	289.1	295.9	-6.7
Base RL-0030.O1 RL 30 (Operations)	431.9	432.2	434.3	0.3	0.1	-2.1	-0.5	1,152.4	1,149.1	3.3
ARRA RL-0030.R1.3 Support Operations	51.4	51.4	51.1	0.0	0.0	0.3	0.5	51.4	51.1	0.3
Total	769.6	769.9	776.3	0.3	0.0	-6.4	-0.8	1,492.9	1,496.1	-3.1*

Numbers are rounded to the nearest $0.1M.

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

Tri-Party Agreement

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Planned Activities

Next 6 months

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

- Complete Operation Test Procedure for 200 West P&T system.
- Complete hookup of 5 interim injection wells to 200 West P&T system.
- Begin drilling and sampling of 6 new injection wells for 200 West P&T.
- Complete 2012 200-PW-1 SVE operations.

200-UP-1

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

Planned Activities

Next 6 months

300 Area

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

100 BC and 100 F/IU Areas

- Issue Draft A RI/FS Report and Proposed Plan to EPA for review.

100 K Area

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

100 N and 100 D/H Areas

- Issue Draft A RI/FS Report and Proposed Plan to Ecology for review.