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River Corridor/Central Plateau
Tri-Party Agreement Milestone Review
Meeting Minutes
April 21, 2011

Approval: _____ Date: 5/19/11
J. Hedges
Ecology IAMIT Representative

Approval: _____ Date: 5/19/21
R.A. Holten
DOE IAMIT Representative

Approval: _____ Date: 5/19/11
D.A. Faulk
EPA IAMIT Representative

Minutes Prepared by:
_____ Date: 5/20/11
T.W. Noland
Mission Support Alliance, LLC

Black, D.G.*	CHPRC
Bloom, R.W.*	CHPRC
Bohnee, G.	NPT
Buelow, L.C.	EPA
Butler, D.H.*	MSA
Brown, M.J.*	Ecology
Call, P.K.	RL
Cameron, C.E.*	EPA
Chang, A.*	Ecology
Charboneau, B.L*	RL
Cimon, S.*	ODE
Collins, M.S.*	RL
Dittmer, L.M.*	CHPRC
Einan, D.R.*	EPA
Faulk, D.A.	EPA
Franco, J.R.	RL
French, M.S.	RL
Gadbois, L.E.*	EPA
Goswami, D.*	Ecology
Harris, S.	CTUIR
Hedges, J.*	Ecology
Henry, D.	OOE
Holten, R.A.*	RL
Jim, R.	Yakama
Johnson, W.F.*	WCH
Kaldor, R.A.*	MSA
Killoy, S.E.*	WRPS
Knox, K.E.*	KCR
Lobos, R.A.*	EPA
Louie, C.S.*	RL
Lynch, J.J.*	ORP
Mattlin, E.M.*	RL
Menard, N.M.*	Ecology
Neath, J.P.*	RL
Nickola, K.L.*	CHPRC
Niles, K.	OOE
Noland, T.W.*	MSA
Ollero, J.F.*	MSA
Ortiz, S.M.*	RL
Piippo, R.E.*	MSA
Price, J.B.*	Ecology
Russell, R.W.	ORP
Salony,C.H.*	RL
Shoemake, J. *	CHPRC
Singleton, D.G.*	Ecology
Skinnarland, E.R.*	Ecology
Teimouri, A.E.*	HQ
Teynor, T.K.*	RL
Vance, J.G.*	MSA
Vanni, J.	Yakama
Walmsley, M.B.*	Ecology
Watson, D.J.*	CHPRC
Whalen, C.*	Ecology
Yasek, D.M.*	WCH
Administrative Record	

*Attendees

River Corridor/Central Plateau
Tri-Party Agreement Milestone Review
Meeting Minutes
April 21, 2011

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

DOE-RL distributed the quarterly summary for January-March 2011. The milestone status, significant accomplishments for the last three months, significant actions planned for the next three months, performance summary and issues were provided.

Milestone Status

M-16-47/M-16-51 - Ecology stated its preference to discuss with DOE-RL different options for some of the waste sites located in the 100-D and 100-H Areas, rather than DOE-RL presenting change requests. DOE-RL responded that its intent is to take a more balanced approach towards reaching a decision regarding remediation for some of the waste sites. DOE-RL indicated that the plan is to finalize the proposed approach this week and provide it to Ecology by mid-May 2011.
M-16-74 - DOE-RL noted that a Remedial Investigation/Feasibility Study (RI/FS) is being developed for EPA's review that will address how waste sites 300-4, 300-15, 300 RRLWS and RLWS will be treated.

Significant Accomplishments - For Last 3 Months

M-16 - Remedial Action/Risk Assessment - DOE-RL noted that two pieces of 100-D spent nuclear fuel will need to be addressed due to the potential for sodium potassium.

Performance Summary

The project performance, including American Recovery and Reinvestment Act (ARRA), continues with a positive schedule and cost variance.

Issues - Ecology noted that following discussion with DOE-RL last week, the agencies are close to a resolution for the path forward to address the 100-N river structures.

EPA raised an issue regarding the RI/FS work plan work that is currently under way. EPA expressed concern that the work seems to be deviating from what the Tri-Party agencies had agreed to in the work plan through years of discussion, and that deviation creates a potential for derailing the RI/FS milestones and timely delivery of the documents. EPA stated that contractors are running STOMP models in calculating groundwater PRGs, but there have been no meetings with EPA and Ecology to discuss the input parameters in STOMP. EPA stated that documents are being developed around those calculations, which is in conflict with agreements that have

been held with the Tri-Parties for some time. EPA stated that if DOE-RL and the contractors want to deviate from those agreements, discussions should be held before time and effort go into modeling and document development.

DOE-RL responded that the RI/FS report is still under development. DOE-RL has held meetings with EPA and is starting to schedule meetings with Ecology. Ecology stated that the issue with modeling had already been brought up and discussed, and the agreement was for DOE-RL to abide by the interim action for modeling. Ecology added if DOE-RL is changing the modeling after the agreement was made, that is an issue that needs to be discussed before any modeling work is done or documents are developed. Ecology stated that EPA and Ecology need to review the parameters that are being used to run the STOMP model. EPA noted that the RI/FS study is due at the end of this year, and if it is not approved by EPA and Ecology, DOE-RL would not have time to prepare another RI/FS. DOE-RL agreed that meetings need to be scheduled with EPA and Ecology to discuss the issue regarding the modeling parameters.

Hanford 100-K Remediation for Applicable M-16 and M-93 Milestones

A summary of the TPA milestone status, facilities and waste sites status, accomplishments, 100-K project risk status, and PBS RL-12 and PBS RL-41 project performance were provided.

M-16-00C - Complete All Interim Response Actions for the 100K Area - DOE-RL noted that the due date for this milestone should be listed as TBD.

M-16-140, Submit Revised RD/RA Work Plans for 100K Area RODs as Primary Document(s) per HFFACO 11.6 with New Proposed Milestones Including the Following: (Due March 31, 2011) - DOE-RL stated that the revised Remedial Design/Remedial Action (RD/RA) work plans were submitted to EPA on March 30, 2011. DOE-RL has started discussions with EPA to negotiate the proposed milestones. EPA stated that it is still evaluating DOE-RL's RD/RA submittal to determine whether it complies with the Record of Decision (ROD) and the requirements of the TPA, and a meeting is scheduled next Monday (4/25/11) with DOE-RL to discuss the issue. Ecology pointed out that this milestone should be included in the handout because it was an activity that occurred during the last quarter, and it is a way of documenting an activity. DOE-RL agreed, and the milestone will be added back in the TPA milestone status. EPA noted that the handout was not received prior to today's meeting, and it is supposed to be sent a week before the meeting.

M-16-53 - EPA pointed out that DOE-RL and EPA have differing definitions on what completion of the remedial action for this milestone is, and therefore EPA is not necessarily in agreement that the status of the milestone is on schedule. DOE-RL explained its position that although all 49 CSNA sites failed confirmatory sampling, the sampling was completed. Since all the CSNA sites failed, remove, treat and dispose (RTD) has been required. EPA's position is that completion of the milestone cannot be declared until the sites are remediated and revegetated. DOE-RL noted that in the Waste Identification Data System (WIDS) the preferred remedy for a number of waste sites is confirmatory sampling, no action required. Ecology

responded that WIDS is a database to track waste site status and not a decision-based system. Ecology noted that DOE-RL uses WIDS as a tool for contract direction for its contractors, which is not the purpose agreed to by EPA and Ecology for the use of WIDS. DOE-RL took note of Ecology's point regarding WIDS, and stated that further discussions with EPA on the issue will take place.

M-93-22 - DOE-RL reported that a baseline change request from the contractor has been approved to complete Interim Safe Storage (ISS) for the 105-KE reactor core. The decision was made last December 2010 to not pursue the core removal option due to funding constraints. The bulk of demolition, in preparation for placing the reactor in ISS, will be done this year. The significant work that has yet to be done will be digging up the tunnel which contained water pipes that run underneath the reactor facility. The discharge chute has been removed, which allowed direct push technology sampling in and around where the basin was. The sampling results haven't been received, but samples taken underneath the reactor block do show contamination. Once the east and west basin are removed, exploration can be done to get a better idea if there is a plume.

M-16-53 and M-16-143 Facilities Status - DOE-RL stated that Phase 1 (M-53) is on schedule. Due to efficiencies, work is under way on some of the facilities in the outer periods. The new water treatment plant is allowing another 500,000 square feet to be taken out with removal of the 183K East Sedimentation Basin, which supplied water to the area. There are known hexavalent chromium plumes in and around the K East Headhouse area. The roof of the 183K West Clearwell has been removed, and a sampling plan is being developed to present to EPA for approval to sample the concrete in the floor. The clearwell stored clean water, and the purpose of the sampling is to determine whether the floor and most of the walls can be left in place, which will save time and money.

M-16-53 and M-16-143 Waste Sites Status - DOE-RL and EPA have been working with the tribal nations regarding cultural affairs issues with K-63 and K-64. A meeting is scheduled next week to continue the discussion to develop a Memorandum of Agreement (MOA) in how to proceed.

M-16-53 Facility Demolition Accomplishments - The discharge line for the process sewer to 1908K East facility was severed, which means no more discharge to the river from the outer K Area. The concrete plug is being poured into the pipeline for the effluent upstream and downstream sites.

Knockout Pot Material Pretreatment and Removal Accomplishments - Acceptance testing was successfully completed for the pretreatment process. The plan is to remove the aluminum wires, grafoil and other non-conforming materials from the knockout pots (KOP). Removal of the material will make packaging into multi-canister overpacks (MCO) less difficult. A readiness assessment is planned for next week, and the following week pretreatment will be initiated. The goal is to reduce the number of MCOs that need to be processed, which will save not only money for the project, but space in the canister storage building (CSB). The packaging system for the

KOP has been constructed, and acceptance testing is being completed.

Three shipments of found fuel from WCH, in addition to about 160 pounds of scrap from 100-K, are planned for processing this summer. DOE-RL stated that the process is under way for the K West Basin going towards what is called fuel free. What is hoped to be the final sludge vacuuming campaign was completed, and the sludge was placed in engineered container 210. K West Basin deactivation activities have been initiated with the removal of debris to make room for installation of the engineered container transfer system in late 2013- early 2014. DOE-RL stated that it is on track to get all the KOP material to the CSB by September of 2012.

Complete Design of Sludge Retrieval and Transfer System Accomplishments - Full scale testing at the Maintenance and Storage Facility (MASF) is underway for sludge transfer using a simulant, and the transfers have been successful, meeting or exceeding the five percent flow criteria. DOE-RL stated that one of the cornerstones of the project is to ensure the physical characteristics of the sludge material is adequately understood and appropriate test applications are developed.

100K Project Risk Status

DOE-RL stated that there has been no change in project risk status.

Project Performance

RL-12 - Contract-to-date the project schedule and cost performance is behind schedule and over budget, due mainly to design challenges and other schedule delays. DOE-RL indicated that the schedule and cost performance will be recovered the end of this fiscal year.

RL-41 - The project performance is behind schedule and slightly under budget. The main issue with schedule performance has been getting the electrical utility rerouting completed. The water treatment plant is now operational, which has allowed work to start on the sedimentation contracts.

Lifecycle Report - M-36-01

A status was provided on the Hanford Lifecycle Scope, Schedule and Cost Report (Lifecycle Report). The first Lifecycle Report is due no sooner than July 25, 2011, and then follow-on reports are due January 31 of each year. The 2012 report will look very similar to the 2011 report. The 2012 report will incorporate some of the analysis associated with System Plan 6 for the tank farms. Agreement was reached with EPA and Ecology that the 2012 report will not contain some alternative analyses on a few operable units due to ongoing work with RCRA decisions. A briefing on the 2011 report is planned for the September Hanford Advisory Board (HAB) meeting.

PFP Closure Project - TPA Milestone M-083

M-83 Status for Interim Milestones

DOE-RL reported that the remaining three milestones are on schedule; however, due to uncertainty with the budget for the next two years, milestone M-83-43 (due 2013) could be impacted.

Accomplishments

Work in PRF has commenced, and one set of pencils tanks was cut up. The PRF work is associated with the 2013 milestone. During the second quarter of FY11, 21 gloveboxes and hoods were removed. Good progress has been made on asbestos removal, process vacuum piping and transfer lines; however, the work on those three areas has slowed somewhat to move some of the teams over to the RMA/RMC line to remove those gloveboxes.

Schedule and Cost Performance

The fiscal year-to-date cost and schedule performance for both base and ARRA is ahead of schedule and below cost.

Non-Regulatory Issues

With the potential funding shortfall, DOE-RL is working to obtain funding for PRF and 242-Z to ensure meeting the 2013 milestone. Currently the President's budget only provides for minimum safe activities ($48 million), and 60 to $70 million more would be needed to maintain the crews.

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

Accomplishments - The 2010 LDR summary report was submitted to Ecology today (4/21/11). Ecology noted its appreciation with the detail included in the site-specific variance request that was submitted.

TPA Quarterly Milestone Review M-91 Series

Significant Accomplishments of the Last Three Months - Ecology expressed concern that the plan to meet every two weeks to discuss the Project Management Plan (PMP) has not been implemented. The revised PMP is due to Ecology by June 30, 2011. Ecology stated that it had not received a response from DOE-RL regarding a meeting that was scheduled last Wednesday. DOE-RL stated that a redline strikeout version of the PMP was sent to Ecology, and it will ensure that email communication with Ecology is working.

Ecology asked about the total amount of certifiable waste (M-091-44). DOE-RL will provide the amount of certifiable waste to Ecology. Ecology asked for a report on the non-milestone legacy

TRU waste. DOE-RL will provide information on the legacy TRU waste in the next quarterly report.

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

DOE-RL provided the milestone status, accomplishments, project baseline performance for base and ARRA, and planned activities for the next six months.

Milestone Status

DOE-RL noted that all of the milestones listed in today's handout are on schedule and should remain in that status for the remainder of the fiscal year. Due to potential funding constraints in FY2012, it is unknown what the status of the milestones beyond 2011 will be.

Significant Accomplishments - 2nd Quarter FY2011

Pump and Treat Operations - The D Area pump and treat facility is using a new resin, which is projected to last longer than a year between changeouts. Previously the resin was changed out monthly.
Sampling - There have been sampling issues associated with electrical hazards on the pumps. Some of the seals have allowed corrosion on the grounding strap, which no longer provides grounding. DOE-RL believes the issue is manageable and under control.
U Plant Canyon - The grout test pours in the north electrical galley have shown the grout is flowing better than expected. The grout flowed into the orifices in drums during testing, which means that the cover blocks will not have to be pulled. A new sequence for the grout pour can be implemented, which will help recover the schedule. The end point by September 30, 2011 is to be demo ready, which means the galleries and cells will be grouted, and the walls can be taken down.
200 West Area Groundwater Treatment Facility - DOE-RL stated that the last of the large vessels is in the building and supposed to be placed today. Once the vessel is anchored down, the main process building will be sealed up.
200-BC Control Area (BCCA) - Mobile platforms have been implemented, which has improved production.
Multi-Incremental Sampling - Ecology inquired about conducting multi-incremental sampling in BCCA Zone B. DOE-RL responded that there is currently no funding for that sampling, but DOE-RL is close to making a decision and placing it on the funding list.
100-NR-2 - DOE-RL stated that all the work plans for the RI/FS in the River Corridor have been approved. Ecology brought up the discussion that was held earlier today regarding the concern that DOE-RL is moving ahead in a new direction on modeling without involving EPA and Ecology (see discussion above on pages 1&2). Ecology noted one particular concern was the discussion about turning off the irrigation pathway. EPA added that the agreement has been to clean up to unrestricted surface use, at least on the surface, which means that irrigation is not restricted; i.e., turned off. DOE-RL responded that its interpretation of unrestricted surface use is

that anything can be done on the surface, but not something that will affect the deep surface. EPA stated that that is a reinterpretation of what the Tri-Parties agreed to. Ecology added that DOE-RL's interpretation of unrestricted surface use is an example of not getting input from the regulatory agencies before proceeding with modeling parameters. DOE-RL took an action to follow up with EPA and Ecology's concern.
100-KR-4 - DOE-RL stated that since the new resin is working so well at DX, an evaluation has been done regarding conversion of the other pump and treat facilities to the same resin. Conversion would not be overly expensive, and there might be some disruption with the pump and treat during conversion. Prior to investing in a conversion, the plan would be to put the resin in a single train. However, there is no funding to move forward, but DOE-RL recognizes the cost benefit with the new resin and will be seeking funding.
100-HX Pump and Treat - DOE-RL clarified that the bullet in the handout should read process building and transfer *building*.
Soil and Groundwater - DOE-RL reported that the soil remediation for the waste sites have met the ARRA KPP. Additional waste sites that are being completed beyond the KPP have to do with shrinking the footprint. Ecology asked if DOE-RL intends to keep working in the outer area through FY12 and FY13. DOE-RL responded that there is not much funding beyond this FY for the project.

Project Baseline Performance

Contract-to-Date - EPA pointed out that in the table on page 19, there appeared to be an error with the cost variance for the ARRA total, and that it should read a positive 2.0 cost variance instead of a negative -0.2. DOE-RL agreed that it appeared to be an error. DOE-RL reported that the main negative cost and schedule variances for ARRA are associated with late design changes for the 200 West pump and treat. Ecology asked if FY12 funding challenges would impact ramping up the treatment rate for the pump and treat program. DOE-RL indicated that it would not.

Planned Activities Next 6 Months

200-BP-5 - Ecology asked about the continuation of the treatability test to extract contaminated water. DOE-RL responded that the extraction will continue, but it will be dependent upon the recharge rate. DOE-RL indicated that the treatability test is consistent with the work plan. Ecology asked when the Draft A Remedial Investigation (RI) report would be submitted for review. DOE-RL will provide a date to Ecology.
200-UP-1 - DOE-RL stated it plans to do the UP-1 Record of Decision (ROD) as a ROD amendment to 200-ZP-1 but is still in discussion with EPA on this path forward.
200-WA-1/200-BC-1 - EPA reiterated a past comment that the draft RI/FS work plan should only cover the West Area because there is already an approved work plan for BC-1. Treatability tests have been done in BC-1, which show that the trenches, and possibly the cribs, can be safely dug up. EPA added that a treatability test for desiccation is also being conducted. DOE-RL responded that it would verify whether the understanding is that the RI/FS should only cover the West Area.

Ecology asked about deferring the well sequestration treatability study due to low priority funding for FY11, noting that the treatability test plan for one uranium reactive gas sequestration and three boreholes were approved by Ecology and EPA and now it is deleted. DOE-RL responded that the explanation is probably because the estimates were conducted five years ago and a bid was awarded based on the estimates, and now there is difference between the (high) estimate and what was set aside and what the final work plan required. DOE-RL indicated that the treatability test plan was probably deleted due to the high estimate, but it will follow up with an explanation to Ecology. EPA voiced its agreement with Ecology about the need for the three boreholes, noting that there are three different programs that are depending on the boreholes to provide information for the 200 West Area.

Ecology asked if the funding is intact for the deep vadose zone supplemental characterization sampling plan, which was approved through the Data Quality Objective (DQO) process over a year ago. DOE-RL responded that the funding is intact. Ecology asked about meeting the M-24 well requirements. DOE-RL stated that there are 13 wells slated for this year, some of which are two years ahead of schedule.

200-IS-1 - Ecology stated that an email was sent to DOE-RL two weeks ago regarding the scope of IS-1 and a response has not been received. Ecology indicated that DOE-RL seems to be proceeding on a path that Ecology does not agree with. DOE-RL agreed that the IS-1 scope is an outstanding issue which DOE-RL is working on. DOE-RL stated that the issue may get moved to the Hanford Senior Executive Committee for resolution. Ecology stated that it would not agree to take the issue to the Senior Executive Committee unless it has had substantive discussion at the technical level and at the Inter-Agency Management Integration Team (IAMIT) level. Ecology noted that the RI/FS work plan is due this year, and there is no sampling included in it. DOE-RL stated that internal discussions have been held and it is likely that a sampling methodology will be incorporated. Ecology encouraged DOE-RL to proceed in a different direction and submit a milestone change request because the milestone would probably not be met by June 30, 2011. EPA added that the 200 West Area is dependent on resolution of the scope of these issues, and suggested that the Tri-Parties meet to discuss the issues. DOE-RL acknowledged the issue and stated that it has ideas that it believes would be agreeable to EPA and Ecology.

Tri-Party Agreement

Thursday, April 21, 2011
Ecology Offices, Conference Room 3A/B
3100 Port of Benton Way
Richland, Washington

Agenda
River Corridor/Central Plateau Milestone Review Meeting
Chairman: Dave Einan

8:30 a.m.	M-16, 89, 93 and 94	River Corridor Closure
9:00 a.m.	M-16 and 93	100 K Remediation
9:30 a.m.	M-36	Life Cycle Report
9:35 a.m.	M-83	PFP Transition
9:45 a.m.	M-26	Land Disposal Restrictions Report
9:50 a.m.	M-91	Acquisition of Facilities to TSD TRU/TRUM and LLMW
10:00 a.m.		Break
10:10 a.m.	M-15, 16, 24, 37 and 85	Soil and Groundwater Remediation
11:00 a.m.	Adjourn Milestone Review	

Tri-Party Agreement River Corridor/Central Plateau Milestone Review
April 21, 2011

Name	Organization
Dale Black	CHPRC
Reed Kaldor	MSA
JAMES LYNCH	DOE
Rod Lobos	EPA
Larry Gadbois	EPA
Tom Teynor	RL/ECP
Dave Einan	EPA
Donna Wasek	WCH
Jack Neck	DOE
JANE HEDGES	ECOLOGY
Nina Menard	Ecology
John Price	Ecology
Ron Skinnarland	Ecology
Cheryl Whalen	Ecology
ROB DIRKS	DOE
Allen Mattlin	DOE
Dennis Sinclair	Ecology
Mign Walmsley	Ecology
Karin Nickola	CHPRC

Tri-Party Agreement River Corridor/Central Plateau Milestone Review
April 21, 2011

Name	Organization
Terry Noland	MSA
Kathy Knox	Knox Reporting
Stevey Simon	O.D.O.E.
Wayne Johnson	WCH
Judy Garde	MSH
Cameron Salony	DOE-RL
Jon Shoemake	CHPRC
Craig Cameron	EPA
Alex Teimouri	DOE-EM-51
Shannon Ortiz	DOE-RL
DM Butler	MSA PFM
Melinda J Brown	Eng NWP
Lorna Dittmer	CHPRC TPA
Steve Killoy	WRPS
Michael Collins	DOE
Richard Bloom	CHPRC-PFP
Vinod Gupta	Ecology
Catherine Louie	DOE-RL
Jennifer Allen	MSH
Albert Chang	Ecology
Dib Goswami	Ecology
Briant Charbonneau	DOE

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

TPA Quarterly Review

For Period: January - March 2011

River Corridor Milestones:

M-16 M-89 M-92 M-93 M-94

Tri-Party Agreement

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

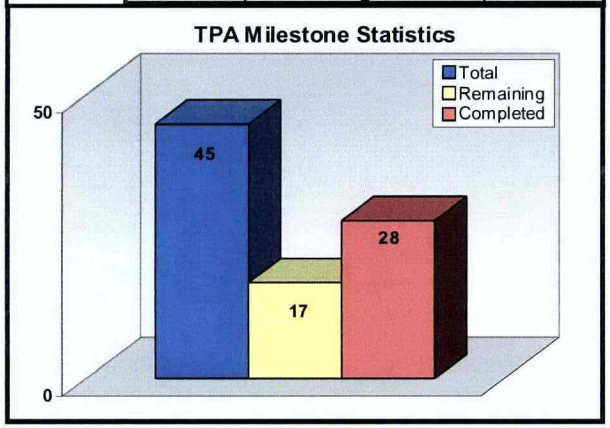
April 21, 2011

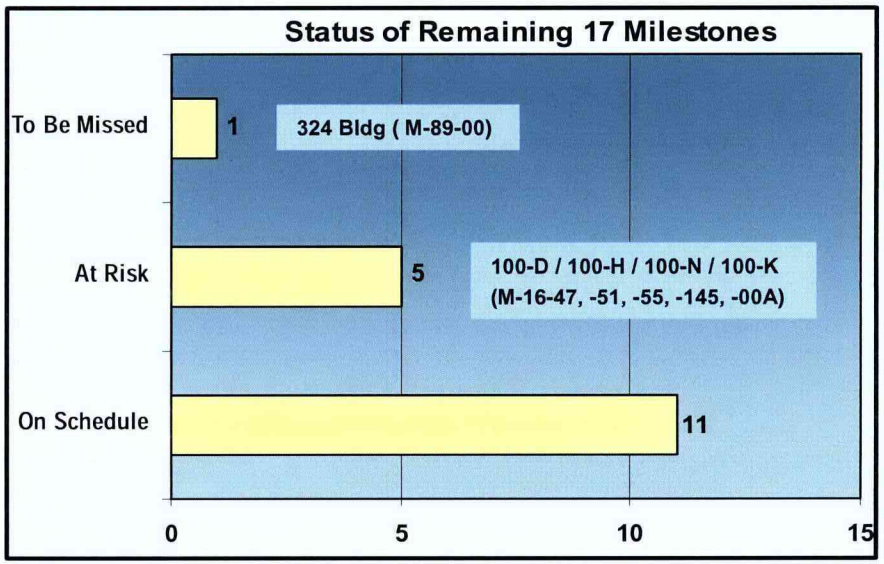
Protecting the Columbia River

E1012043

TPA Milestone Statistics
(Includes Target and Commitment Milestones)

Total	Remaining	Completed	Completed On	Completed Ahead
45	17	28	4	24





Quarterly Summary (January-March 2011)

- **Completed TPA milestones:**
  -- No milestones were completed during this reporting period.

- **Approved two change requests:**

  -- M-16-09-06 approved on 2/2/11 removed two pipeline segments (100-D-31:11, :12) from M-16-47 - Complete Interim Remedial Actions for 100-D Area (due 12/31/11).

  -- M-94-11-01 approved on 2/1/11 extended date six months for M-94-08 (from 12/31/11 to 6/30/12) - Complete the Selected Removal and/or Remedial Actions for 11 of the Following High Priority Facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, 327, 333, 340, 340B, 3706, and 3720.

TPA MS No.	Compliance Date	Title	Status	Comments
M-16 Milestones - Remedial Action (milestones through 12/31/2012 and "at risk")				
M-16-47	12/31/11	Complete Interim RA for 100-D Area	At risk	Waste sites within milestone scope are being assessed against project schedule to identify where efficiencies can be gained. Change requests are being prepared to propose removal of backfill/revegetation from sites which will be affected by future remediation.
M-16-51	12/31/11	Complete Interim RA for 100-H Area	At risk	Waste sites within milestone scope are being assessed against project schedule to identify where efficiencies can be gained. Change requests are being prepared to propose removal of backfill/revegetation from sites which will be affected by future remediation.
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	On schedule	
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, and 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	At risk	Waste site cleanup and facility demolition are being coordinated to optimize 100-N remediation. An integrated and aggressive schedule is being implemented to meet TPA milestone requirements.
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	At risk	Sites in this milestone are those listed in IROD prior to August 2009. Two sites (600-29, 128-K-2) included in this milestone are currently not in WCH contract for remediation, and require an approved REA prior to performing design and another REA for remediation.
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	At risk	At risk due to M-16-47, -51, -55, -145.

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 by 9/30/11 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 Milestone - 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	

Significant Accomplishments – For Last 3 Months:

M-16 – Remedial Action / Risk Assessment:

- Continued 100-C-7 concrete demolition loadout to U-Canyon.
- Prepared for 100-D spent nuclear fuel shipments to K-Basin.
- Completed excavation of 118-K-1 Trench I Silo 3.
- Continued 6-month in-situ bioremediation operational testing at 100-N Area.
- Received approval of 22 waste site closure documents during this reporting period (includes 7 American Recovery and Reinvestment Act [ARRA] sites).
- Issued 100-F/IU-2/IU-6 – Segment 3 Orphan Sites Evaluation Report.
- ARRA – Confirmed hexavalent chromium contamination at 100-F-57.
- ARRA – Continued mockups and training for 618-10 trench remediation.
- ARRA – Initiated 618-11 non-intrusive characterization (NIC) mobilization.

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

- Continued planning for remediation of new waste site 300-296 under B-Cell.
- Continued hazardous waste removal and deactivation activities.
- Completed fixative application in Shielded Materials Facility east cell and airlock.
- Shipped High Bay tank to ERDF.

M-93 – Reactors Final Disposition:

- Completed 109N roof installation except pressurizer shed and punchlist items.
- Completed demolition/loadout of 105N Fuel Storage Basin Transfer Bay; continued safe storage enclosure (SSE) design.

M-94 – 300 Area Surplus Facilities Disposition:

- Completed removal of 309 dome.
- Completed 308 glovebox (non-macroencapsulated) shipments to Perma-Fix.
- Continued 327 below-grade demolition.

Material from Test Pit Campaign at 100-F-57 - Placed on White Plastic

Removal of 309 Dome

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

ERDF:

- For period January-March 2011, disposed nearly 470,000 tons of waste in ERDF.
- Began placement of waste in Super Cell 9.
- ARRA – Completed Super Cell 10 acceptance testing.
- ARRA – Completed dome covers for leachate tanks 3 and 4.
- ARRA – Completed Phase 5 container transfer area expansion.
- ARRA – Continued construction of container, truck, and equipment maintenance facilities.
- ARRA – Continued construction of crest pad buildings 1 and 2.
- ARRA – Started construction on ERDF gate entrance.
- ARRA – Continued production of radio-frequency identification tags for new waste container tracking system.

Placing Dome Cover on ERDF Leachate Tank

Significant Actions Planned – For Next 3 Months:

M-16 – Remedial Action / Risk Assessment:

- Complete excavation at 100-C-7 and 100-C-7:1.
- Begin excavation at 100-D high priority chromium sites.
- Complete 118-K-1 Trench I silo remediation.
- Complete 100-N in-situ bioremediation operational testing.
- Receive/evaluate proposals/bids for 300 Area Remaining Sites subcontract.
- Submit WCH input to integrated long-term stewardship transition and turnover package for Segment 2 to RL.
- ARRA – Complete Draft A review of remaining 100-IU-2/6 closure documents.
- ARRA – Initiate 618-10 trench remediation.

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

- Continue remediation planning activities for site 300-296 under B-Cell.
- Continue hazardous waste removal and deactivation activities.

M-93 – Reactors Final Disposition:

- Complete below-grade demolition of 105N Fuel Storage Basin.
- Complete installation of 105N structural steel beams and columns.
- Complete 109N SSE roofing and siding installation.

M-94 – 300 Area Surplus Facilities Disposition:

- Complete Phase 1 of 327 below-grade demolition.
- Mobilize subcontractor to wire-saw 327 carousel / lower SERF cell.
- Complete below-grade demolition of 315C, 315D, 335, 336, 338, 3706, 3707F.

ERDF:

- ARRA – Complete batch plant installation.
- ARRA – Complete septic system inspection.
- ARRA – Complete construction of container and equipment maintenance facilities.
- ARRA – Complete construction of crest pad buildings 1 and 2.

PERFORMANCE SUMMARY (includes ARRA)

Contract Inception (8/25/05) through March 2011

($K)

	IPB		CUMULATIVE			Previous Quarter Comparison			
						SCHEDULE VAR ($)		COST VAR ($)	
	BAC	EAC	BCWS	BCWP	ACWP	*Dec*	Mar	*Dec*	Mar
D4	548,966	502,908	339,813	397,252	302,369	*37,235*	57,439	*107,731*	94,883
Reactor ISS	87,920	91,392	64,693	66,478	63,359	*-21,992*	1,785	*2,848*	3,119
Field Remediation	589,918	611,704	397,207	406,686	359,251	*4,527*	9,479	*49,683*	47,435
Waste Operations	411,429	370,268	261,294	335,376	278,540	*68,617*	74,082	*49,782*	56,836
ESFC	64,712	65,826	49,773	51,538	45,478	*775*	1,765	*6,184*	6,060
Mission/General Support	270,730	417,588	223,049	223,049	218,686	*0*	0	*4,215*	4,363
Transition	3,979	3,747	3,979	3,979	3,747	*0*	0	*232*	232
Contingency	59,525	59,525							
TARGET COST TOTAL	**2,037,177**	**2,122,958**	**1,339,808**	**1,484,359**	**1,271,431**	***89,162***	**144,551**	***220,674***	**212,928**

Schedule Variance (PMB): $144,551K

- Acceleration of 300 Area and 100-N Area building demolitions.
- Accelerated remediation work at 100-B/C, CLIN 4, and 100-H Areas; partially offset by negative variances associated with delays of miscellaneous restoration, 118-K-1, and 100-IU-2/6 and 100-D closeouts.
- ERDF Super Cells 9/10 construction completed ahead of schedule.
- ERDF transportation, treatment, and disposal support to accelerated work in FR and D4 Projects.

Cost Variance (PMB): $212,928K

- Significant underruns experienced in 300 Area building characterization, deactivation, and demolition activities.
- 100-D/F/H/K and 100-IU-2/6 remediation underruns. Partially offset by significant project support costs at all active dig sites, particularly in the 300 Area; as well as additional 100-C-7 excavation and concrete demolition costs; and unplanned costs in project management and support.
- 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 2011

($K)

	IPB		CUMULATIVE			Previous Quarter Comparison			
						SCHEDULE VAR ($)		COST VAR ($)	
	BAC	EAC	BCWS	BCWP	ACWP	*Dec*	Mar	*Dec*	Mar
RL0041.R1.2 - Cell 9 / ERDF	51,361	44,117	47,971	49,459	42,660	*4,175*	1,488	*6,944*	6,799
RL0041.R1.3 - Acc Rem / ERDF	56,097	39,682	43,253	45,357	29,970	*1,976*	2,104	*12,974*	15,387
RL0041.R1.4 - Cell 10	37,672	27,072	24,203	36,757	26,275	*17,182*	12,555	*10,687*	10,483
RL0041.R2 - 618-10	65,977	62,622	37,345	42,344	40,440	*2,558*	5,000	*-157*	1,905
Contingency	8,464	8,464							
TARGET COST TOTAL	**219,571**	**181,957**	**152,773**	**173,916**	**139,345**	***25,890***	**21,144**	***30,448***	**34,571**

Schedule Variance (PMB): $21,144K

- ERDF Cells 9/10 construction completed ahead of schedule.
- ERDF waste transportation and disposal less than planned, fueling truck received ahead of schedule, construction of maintenance facilities behind schedule.
- 100-F remediation started earlier than planned.
- 618-10 drum punch design and fabrication started ahead of schedule; infrastructure upgrades are ahead of schedule.

Cost Variance (PMB): $34,571K

- ERDF Cells 9/10 construction realized efficiencies.
- ERDF equipment and facility upgrade costs less than budgeted.
- Field Remediation project support requirements less than planned in baseline.
- Fewer comments received and streamlining the confirmatory sampling process (e.g., use of fewer sub-sites than originally planned) have resulted in significantly lower analytical costs and positive cost variances in several accounts.
- 618-10 well installation and overall infrastructure upgrades are under budget; partially offset by design costs impacted by multiple waterline design, material-at-risk calculations, and other miscellaneous document overruns.

RCC Issues

- Determining impact of radiological contamination encountered under the 324 facility. This will affect schedule for demolition of the 324 Complex.

- TPA Milestones M-16-47 and M-16-51 have both been declared as being "at risk". Change requests are being drafted to resolve the "at risk" status for these milestones. Changes include extending the completion schedule for 100-D-8 because the river flow is too high to remediate below the ordinary high water mark, and removing backfill and revegetation from selected waste sites at 100-D and 100-H to support ongoing remediation.

- Need a mutually agreed upon approach for addressing the 100-N river structures to begin installation of the bench within the August 2011 in-water work window. DOE will continue to work with Ecology to develop a path forward for remediation of the 100-N river structures.

Hanford 100-K Remediation

Tri-Party Agreement Milestone Review

for Applicable
M-16 and M-93
Milestones

U.S. Department of Energy
Richland Operations Office (RL)
River Corridor Project

April 21, 2011

TPA Milestone Status

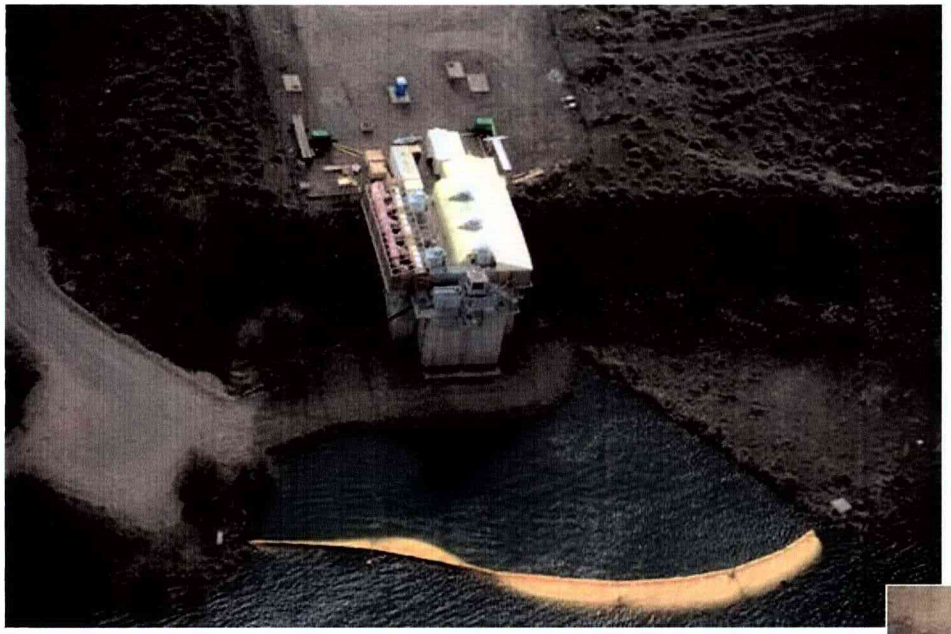
Number	Milestone Title	Due Date	Status / Comments
M-16-00C	COMPLETE ALL INTERIM RESPONSE ACTIONS FOR THE 100K AREA.	See below	See below
M-16-53	COMPLETE THE INTERIM RESPONSE ACTIONS FOR THE 100K AREA WITHIN THE PERIMETER BOUNDARY AND TO THE RIVER FOR PHASE 1 ACTIONS.	12/31/2012	On Schedule
M-16-143	COMPLETE THE INTERIM RESPONSE ACTIONS FOR THE 100K AREA WITHIN THE PERIMETER BOUNDARY AND TO THE RIVER FOR PHASE 2 ACTIONS.	12/31/2015	On Schedule
M-93-22	COMPLETE 105KE REACTOR INTERIM SAFE STORAGE IN ACCORDANCE WITH THE REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN.	07/31/2014	On Schedule

September 2009

February 2011

105KE – South Side

105KE – North Side



181KE Pump House

181KW Pump House

183KW Sedimentation Basin

183KE Sedimentation Basin

M-16-53 and M-16-143 Facilities Status

Phase 1 M-016-053: December 31, 2012	Phase 2 M-016-143: December 31, 2015	Phase 3 (to be determined)
110KE Gas Storage Facility	115KW Gas Recirculation Building	105KW Water Tunnel
115KE Gas Recirculation Building	116KW Reactor Exhaust Stack	142K CVDF
116KE Reactor Exhaust Stack	117KW Exhaust Air Filter Building	1506K1 Fiber Optics Hut
117KE Exhaust Air Filter Building	118KW Horizontal Control Rod Storage Cave	165KE Power Control Bldg
118KE Horizontal Control Rod Storage Cave	119KW Exhaust Air Sampling Building	142KA CVDF Generator Bldg
119KE Exhaust Air Sampling	166AKE Oil Storage Facility	165KW Power Control Bldg
1706KE Radiation Control Counting Lab	166KE Oil Storage Vault	167K Cross-tie Tunnel Bldg
1706KEL Developmental Lab	166KW Oil Storage Vault	1717K Maintenance Shop
1706KER Water Studies Recirculation Bldg	1705KE Effluent Water Treatment Pilot Plant	1724K Maintenance Shop
1713KE Warehouse	1713KER Shop Building	1724KA Storage Shed
1714KE Oil and Paint Storage Shed	1713KW Warehouse	181KW River Pump House
183.4KW Clearwell	1714KW Oil and Paint Storage Shed	183KE Chlorine Vault
183.1KW Head House	1720K Administration Office Building	183.2KE Sedimentation Basin
181KE River Pump House	1724KB Gas Bottle Storage Facility	183.3KE Filter Basin
183.2KW Sedimentation Basin	182K Emergency Water Reservoir Pump House	183.4KE Clearwell
183.3KW Filter Basin	183.5KW Lime Feeder Building	183.1KE Headhouse
MO048 Construction Lunch Trailer	183.6KW Lime Feeder Building	183.5KE Lime Feeder
MO060 Conference Trailer	MO101 Administration	183.6KE Lime Feeder
MO872 Leased trailer	MO102 Administration	185K Potable Water Treatment Plant
MO873 Leased trailer	MO214 Administration	1908K Outfall Structure
MO969 HPT Change Trailer	MO382 Office	1908KE Outfall Structure
1605KE Guard Tower East	MO401 Administration	190KE Main Pump House
	MO402 Administration	190KW Main Pump House
	MO442 Classroom/Office	MO054 Construction Lunch Room
	MO506 CVDF Lunch Room	MO500 Administration
	MO507 CVDF Conference Room	MO236 KW Ops/HPT Change
	MO907 Administration	MO237 KW Construction Forces
	MO917 CVDF Administration	MO323 CVD Change Trailer
	MO928 Administration	MO955 Conference Room
		1605KW Guard Tower West

Field Work In Progress

Demolition Complete

Closure Actions and Documentation Complete

M-16-53 and M-16-143 Waste Sites Status

Phase 1 M016-053, December 31, 2012		Phase 2 M-016-143: December 31, 2015		Phase 3 (to be determined)	M-016-57 (Initiate soil remediation at K East Basin)
100-K-3	100-K-71	100-K-1	120-KE-8	100-K-35	UPR-100-K-1
100-K-6	100-K-77	100-K-4	120-KE-9	100-K-43	
100-K-18	100-K-79	100-K-5	120-KW-6	100-K-47	
100-K-19	116-KE-1	100-K-13	126-KE-2	100-K-55	
100-K-34	116-KE-3	100-K-14	130-K-2	100-K-56	
100-K-36	116-KE-6A	100-K-25	130-KE-2	100-K-72	
100-K-37	116-KE-6B	100-K-27	130-KW-1	100-K-73	
100-K-38	116-KE-6C	100-K-48	130-KW-2	100-K-74	
100-K-46	116-KE-6D	100-K-49	132-KW-1	100-K-75	
100-K-53	118-KE-2	100-K-54	1607-K1	100-K-80	
100-K-55(pt#1)	120-KW-1	100-K-55	1607-K2	100-K-81	
100-K-56	120-KW-2	100-K-56(pt#2)	1607-K4	100-K-82	
100-K-57	120-KW-3	100-K-60	1607-K5	116-K-3	
100-K-62	120-KW-4	100-K-61	1607-K6	116-KE-2	
100-K-63	120-KW-5	100-K-66	100-K-94	116-KW-2	
100-K-64	120-KW-7	100-K-67	100-K-97	118-KW-1	
100-K-68	130-KE-1	100-K-83	100-K-101	128-K-2	
100-K-69	132-KE-1	116-KW-1	100-K-103		Legend:
100-K-70	1607-K3	118-KW-2	100-K-104		Excavation in progress
	100-K-102	120-KE-1	100-K-105		Failed CSNA pending Contract Action
		120-KE-2	100-K-106		Mixed Failed and RTD
		120-KE-3	100-K-107		Closure Docs in Process
		120-KE-4	100-K-108		Closure documentation complete
		120-KE-5	100-K-109		Backfill complete
		120-KE-6	100-K-110		Revegetation complete

M-16-53 Facility Demolition Accomplishments

- 183KE and 183KW Clearwells have been drained of water and water discharged to river in accordance with NPDES permit.
- 183KE Sedimentation Basin has been drained of water and water discharged to river in accordance with NPDES permit.
- Demolition of 183KE and 183KW Clearwells has commenced.
- Demolition of 183KE Sedimentation Basin has commenced.
- 183KE Headhouse has been removed.
- 183KE Chlorine Vault has been removed.
- 185KE Potable Water Treatment Facility has been removed.
- 1908K Discharge line to the river has been severed ending future discharges to river. NPDES permit is being withdrawn.
- Initiated transferring demolition rubble from 100-K to U Plant for fill under the barrier.
- Initiated preparation of closure reports for facilities that have been removed.

Knockout Pot Material Pretreatment and Removal Accomplishments

Knockout Pot (KOP) Sludge Pretreatment

Completed qualification testing of system components including Operator training using KOP sludge simulants at MASF KOP Test Tank.

- Removed system components from MASF KOP Test Tank and installed the system in the K West Basin.
- Removed KOP 12 from Integrated Water Treatment System to retrieve its inventory as part of pretreatment preparation.
- Operating procedures and processing plans have been prepared and are being reviewed.
- Readiness preparations for system startup have commenced.

KOP Sludge Processing

- Qualification test plan for testing of system components at MASF KOP Test Tank using simulants was prepared.
- Fabrication of system components has been completed, delivered to MASF, and installed in KOP Test Tank for testing with sludge simulants.
- Procurement of Multi Canister Overpacks (MCOs) has progressed to contract award and fabrication of this long lead item.

Complete Design of Sludge Retrieval and Transfer System Accomplishments

K West Basin Annex Design

- Contract was awarded for Annex design, and design has started.
- Design for initial modifications to the existing annex involving the addition to a fire wall in the existing annex and structural bracing was completed to support early construction.

Processing System Design and Procurement

- PNNL provided an advance report on the physical properties, uranium metal, total uranium, radionuclides, etc. from samples from Engineered Container 230 which holds sludge from the Integrated Water Treatment System Settler Tanks.
- Procurement of the Sludge Transfer and Storage Containers (STSCs) has commenced.

Processing System Testing

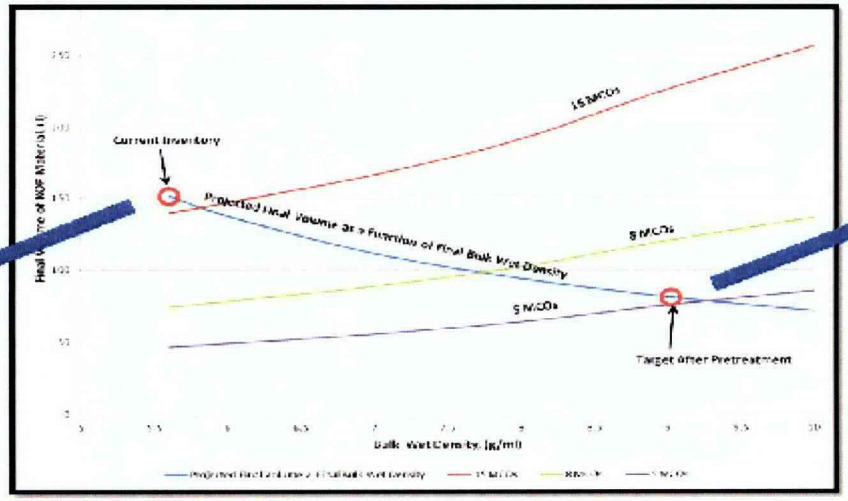
- Testing of the decant water stream from filling the Sludge Transfer and Storage Containers has been completed using sludge simulant.
- Integrated testing of the Engineered Container Retrieval System (ECRTS) for Technology Readiness Level Six using sludge similants has begun in the MASF K Basin Pool mockup .

K West Basin Facility Modifications

- Initial modifications to the existing annex have commenced to make way for the new annex addition.

Mockup of Basin Pool at MASF

KOP Material Pretreatment



INITIAL INVENTORY IN FUEL CANISTERS

KOP MATERIAL:

- ALUMINUM HYDROXIDE
- ALUMINUM WIRE
- GRAFOIL
- URANIUM FUEL PIECES

DENSITY ~5.5 g/cc

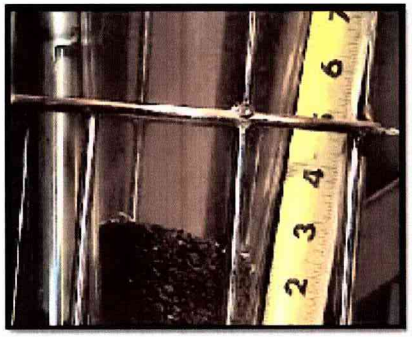
REQUIRE ~15 MCOs TO PACKAGE

LOW-DENSITY MATERIAL REMOVED DURING PRETREATMENT ACTIVITIES

ALUMINUM HYDROXIDE AND GRAFOIL

ALUMINUM WIRE

FINAL INVENTORY FOR MCO PACKAGING



KOP PRODUCT MATERIAL

- URANIUM FUEL PIECES

TARGET DENSITY ~9.0 g/cc

REQUIRE ~6 MCOs TO PACKAGE

M-93-22 K East Reactor
Interim Safe Storage Accomplishments

- Performed field characterization of the reactor core though ten existing penetrations.
- Completed demolition of the 105-K East Basin discharge chute.
- Continued demolition of west side of Reactor Building
- Completed A/G demolition of east side of Reactor Building office area.

100K Project Risk Status

Risks are those factors associated with the Project, both existing and emerging, that can result in cost and schedule impacts.

Sub-project	Major Remaining Risks with "Possible" or "Likely" Likelihood of Occurrence and Risk Mitigation	Emerging Risks and Risk Mitigation
K West Basin	Future fuel and sludge handling will have potential to deposit additional sludge on K West Basin floor. Mitigation: Design sludge handling system with provisions to minimize depositing additional sludge on basin floor.	
Facility D4	Drawing unavailability / errors or undocumented facility configuration modifications cause work stoppage during facility isolation. Mitigation: Where necessary, hand-over-hand tracing is being performed. Utility isolation project will deactivate electrical and water over wide area, minimizing risk to incomplete isolation.	
Sludge Treatment	Results from the testing program yield different outcome than expected forcing redesign and/or different technology selection. Mitigation: Conduct testing necessary to support Critical Decision-2/3 in a timely manner.	
Waste Site Remediation	Risks have been realized associated with radiological conditions at waste site UPR-100-K-1 requiring additional controls and increased volumes of waste to manage resulting in more time and resources than expected.	

PBS RL-0012 – Project Performance

WBS & Title	Contract to Date ($000)					BAC
	BCWS	BCWP	ACWP	SV	CV	
012.01 - Program Management	13191	13191	12223	0	968	25643
012.02 - Basin Operations & Maintenance	22462	22462	24201	0	-1739	64607
012.03 - Facility Operations	9502	9502	10508	0	-1006	42752
012.09 - Sludge & Fuel Disposition Management	4194	4194	4810	0	-616	5039
012.11 - 100K Facilities Deactivation	524	524	545	0	-21	524
012.13 - KE Basin Demolition	9220	9220	10402	0	-1182	9220
012.14 – KW Basin Decontamination & Deactivation	0	0	0	0	0	16455
012.15 0 KW Basin Demolition	0	0	0	0	0	25864
012.16 - Sludge Treatment Project	79716	75917	75928	-3799	-11	267813
012.90 - Assessments - PBS RL-12	6119	6119	7039	0	-920	13300
012.98 - Transition	21768	21768	23170	0	-1402	21768
012.99 - PBS RL-12 G&A and Direct Distributables	22032	22032	21913	0	119	87131
TOTAL RL-0012 - SNF Stabilization and Disposal	188728	184929	190739	-3799	-5810	580116

PBS RL-0012 – Project Performance - continued

- Schedule Performance (-$3.8M / -2.0 %)
  - The STP negative variance is due to:
    - Management decisions to hold procurement of the multi-canister overpacks (MCOs) until engineering evaluations were conducted (-$0.9M);
    - Difficult contract negotiations with the Phase 2 technology vendors (-$0.7M);
    - Several subcontracts for the Engineered Container Retrieval, Transport, and Storage (ECRTS) were not awarded as planned, and are now behind schedule (-$0.8M);
    - Settler Tank sampling started late because of Settler Retrieval Pump issues (-$0.1M);
    - KOP Design, Testing and Pre-Treatment are activities behind schedule (-$0.8M); and
    - Engineered Container 210 sampling is behind schedule due to 100K basin vacuuming activities (-$0.5M).
- Cost Performance (-$5.8M / -3.1%)
  - The 100K negative variance (-$3.6M) has two main components:
    - The impact to demolition and waste shipments from the K East Basin excavation has a variance of (-$1.2M). The effort was completed in FY2009.
    - K West Basin Operations (-$2.4M) impacts remaining from implementation of operational controls and cost to maintain aging facilities in the 100K Area.
  - The PBS RL12 G&A and Assessments negative variance (-$2.2M) is related to the overall cost overrun of the PBS, drawing a larger allocation of this costs to the PBS.

PBS RL-0041 – Project Performance

WBS and Title	Contract to Date ($000)					
	BCWS	BCWP	ACWP	SV'$	CV $	BAC
041.02.01.01 – 100K Area Planning and Integration	638	560	422	-78	138	1375
041.02.02.01 – 100–K Group 1 Structures Remediation	20435	19691	21325	-745	-1634	22765
041.02.02.02 – 100–K Group 1 Remediation	37212	33411	25230	-3801	8181	102554
041.02.03.01 – 100–K Group 2 Structures Remediation	3794	2447	1719	-1347	727	6943
041.02.03.02 – 100–K Group 2 Remediation	2781	5641	783	2860	4857	5641
041.02.04.01 – 100–K Group 3 Structures Remediation	4812	2169	2678	-2644	-509	32948
041.02.04.01 – 100–K Group 3 Remediation	7	835	0	828	835	835
041.02.06.01 – KW Deactivation	13016	15024	13649	2008	1375	20192
041.02.07.01 – 100K Area Utilities Re-Route	21753	21744	31083	-9	-9339	21753
041.02.08.01 – 105KE Reactor Disposition - ISS	9464	8884	9984	-580	-1101	9971
041.02.08.02 – 105KW Reactor Disposition	0	0	12	0	-12	22696
041.02.08.03 – Site Preparation	2938	2939	2748	1	191	5672
041.02.08.04 – 105KE Obstruction Removal	3152	3153	3098	0	55	4058
041.02.08.05 – Core Removal	5628	5627	5713	-1	-86	6362
041.02.08.06 – 105KE Demolition	0	0	0	0	0	0
041.02.09.01 – 618-10 & 11 Burial Grounds Remediation	0	0	0	0	0	36096
041.02.10.01 – RL41 Transition Sub Assignments	0	0	29	0	-29	0
041.02.11.01 – 100K Project Management	11766	10954	13765	-812	-2811	49985
041.02.12.01 – 100K Bioremediation	0	0	0	0	0	4781
041.90 - PBS RL-0041 Assessments	3699	3699	5023	0	-1324	28047
041.98 - WBS 041 Transition	11743	11743	6	0	1536	13009
041.99 - PBS RL-41 PRC G & A and Direct Distributables	23572	23572	21244	0	2328	87273
Total – RL-0041 – Nuc Fac &D – RC Closure Project	176411	172089	168711	-4321	3379	482953

PBS RL-0041– Project Performance - continued

- Schedule Performance (-$4.3M /-2.4%). Negative schedule variance is due to:
  - Delays in waste site remediation around the 105KE Reactor bldg (-$0.1M);
  - Delays to completion of the 100K Utilities Reroute projects impacting the performance of D4 Cold & Dark activities (-$4.7M);
  - 105KE Reactor for removal of the discharge chute (-$0.6M); and ,
  - Project Management for General Site Cleanup (-$0.9M).
  - They are partially offset by accelerated vacuuming and debris removal in 105KW Basin Debris Campaign (+$2.0M).

PBS RL-0041– Project Performance - continued

- Cost Performance (+$3.4M/+2.0%)
  - The positive cost performance is primarily from Waste Site Remediation which consists of 100-K Group 1 Remediation (+$8.2M) and 100-K-55 Part 1 and CSNA sites completing at lower cost than anticipated;
  - 100-K Group 2 Remediation (+$4.9) completing 100-K-56, Part 2 completing at lower cost than anticipated; and,
  - 100-K Group 3 Remediation (+$0.8M) caused by early completion of the CSNA sites at less cost than anticipated.
  - In addition, K West Deactivation debris removal campaign exceeded performance goals (+$1.4M) and G&A/direct distributable costs (+$1.3M) were less than planned.
  - These positive variances are being offset by 100K Project Management activities (-$2.7M) where FY10 general site cleanup labor was utilized more than planned;
    - Facilities (-$1.2M) since planning continues but performance cannot be taken until after the C&D field work occurs; and,
    - 100K Area Utilities Reroute (-$9.3M) due to realized risks and design changes.

U.S. DEPARTMENT OF
ENERGY

TPA M-36-01
Quarterly Performance Report

April 21, 2011

Shannon Ortiz, Project Manager

U.S. DEPARTMENT OF ENERGY

MILESTONE DESCRIPTION AND DELIVERABLE

The USDOE shall prepare and submit to EPA and 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) is due "no sooner than nine months after incorporation of the milestone into he TPA" which is July 25, 2011. Follow on reports are due January 31 of each year. (The 2012 Lifecycle Report is due January 31, 2012)

RL PROGRAM MANAGERS ASSESSMENT OF CONTRACTOR PERFORMANCE

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

Contractor performance related to design and preparation of the 2011 Lifecycle Report is progressing on schedule.

SIGNIFICANT ACCOMPLISHMENTS FOR THE LAST THREE MONTHS

1. The 2011 Lifecycle Report has been drafted in a way that is user friendly (clear graphics, concise text, organization and alignment with DOE cleanup initiatives).
2. The 2011 Lifecycle Report has been reviewed by DOE leaders at Hanford and is under review at HQ.
3. Completed the 200-SW-2 waste removal detailed cost estimate for the 2011 Report.
4. Completed the OUO determination, the 2011 Lifecycle Report is not considered to be OUO.
5. Began alternative analysis scoping for the 2012 Lifecycle Report, and received timely direction from EPA and Ecology.
6. Convened the first M-36 Project Manager Meeting (PMM). Transitioned the Lifecycle Report Work Group meetings and issue list into the M-36 PMM.

SIGNIFICANT PLANNED ACTIONS FOR THE NEXT SIX MONTHS

1. Complete the 2011 Lifecycle Report on time, and brief EPA, Ecology and Oregon, consult with the Tribes, and provide it to the public on the DOE website.

2. Engage the Hanford Advisory Board in review and feedback related to the 2011 Report.
3. Make progress on preparation of the 2012 Report.

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

Before ***After***

<u>All</u> 2736-ZB Gloveboxes Removed

April 2011
Tri-Party Agreement Milestone
Status Report

Ecology Project Manager – R. Bond
DOE-RL Project Director – E. Mattlin
PFP Closure Project – D. Del Vecchio
CHPRC Environmental – S. Richey

M-83 Status for Interim Milestones

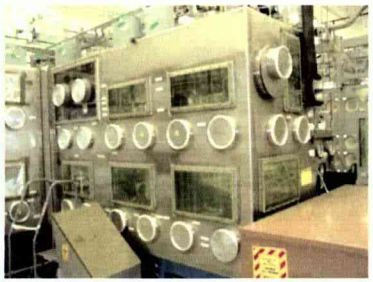
(as of 3/31/11)

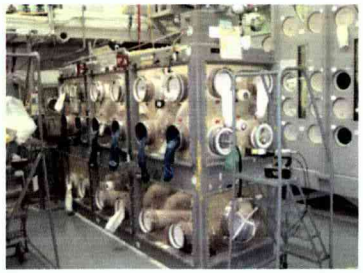
TPA No.	TPA Commitment Date	Milestone Title	Status
M-083-32	9/30/11	COMPLETE CLOSURE OF THE PFP 241-Z TSD UNIT	***Complete***
M-083-42	9/30/11	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 241-Z WASTE TREATMENT FACILITY	***Complete***
M-083-24	6/30/12	SUBMIT S&M PLAN	***On Schedule***
M-083-43	9/30/13	COMPLETE TRANSITION OF THE 242-Z WASTE TREATMENT FACILITY AND 236-Z PRF	***On Schedule***
M-083-44	9/30/15	COMPLETE TRANSITION OF THE 234-5-Z (PFP), 243-Z LLW Treatment, 291-Z and Z-1 Stack	***On Schedule***

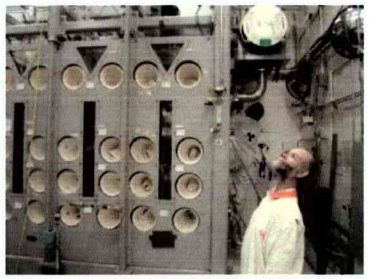
Accomplishments

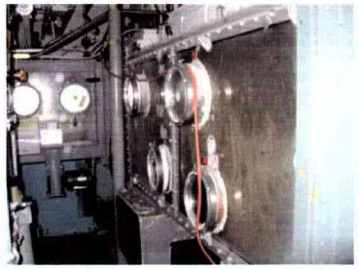
- 1M hours without a lost workday incident
- All gloveboxes removed from 2736 ZB
- 2736-ZB main stack down graded to minor
- Completed cutting up one set of pencil tanks in PRF
- Removed and Dispositioned 19 Glove Boxes/Hoods during 1st quarter 2011 (135 total removed, 129 shipped by PRC)
- Over 1,300 Linear Feet of Asbestos Removed from PFP Piping and Ducting during 1st quarter (more than 14,400 total feet removed)
- 638 Feet of Process Vacuum Piping Removed for the Quarter (1,210 Total Feet Removed)
- 141 Feet of Transfer Lines Removed for the Quarter (486 Total Feet Removed)

Room 230C Progress









Only two Small sections of conveyor glovebox remain

Planned Activities

- Removal and closure of 2721-Z-2 diesel Underground Storage Tank (UST)
- Prepare and demolish 2721-Z, 2736-Z/ZA/ZB
- Continue glovebox clean out and removal
- Continue PRF pencil tank removal
- Continue 242-Z glovebox/equipment removal
- Submit RAWP and S&M Plan to Ecology for Review

Schedule / Cost Performance
Fiscal Year to Date Status (through March)

RL-0011 - Nuclear Material Stabilization & Disposal (PFP)	Fiscal Year to Date				
	BCWS	BCWP	ACWP	SV$	CV$
(ARRA/ & Base) -Total	61,179	75,512	78,347	14,332	(2,836)

(Numbers are rounded to the nearest $0.1M)

FYTD Schedule Performance: ($14.3M/23.4%)

- Re-Planning of PFP KPP Glovebox work scope incorporating recovery plan to complete work by 9/30/11.
- Gain offset by:
  - Breathing Air, Beryllium and Radiological Controls Issues

FYTD Cost Performance: (-$2.8M/-3.8%)

- Inefficiencies in D&D due to staffing an involuntary P/Q shift to support RMA/RMC process line work; additional staff required to support breathing air versus PAPR work; increased overtime due to complexity of work; and, more time required to complete 2736ZB complex intrusive investigations due to new Radiological Controls requirements for work above eight feet.

Issues

Regulatory Issues:

- None

Non-Regulatory Issues:

- Potential funding shortfall

Land Disposal Restrictions Report
(Tri-Party Agreement Milestone M-26-01)
Quarterly Presentation
April 21, 2011

Tri-Party Agreement

Deborah Singleton, Ecology Lead
Michael Collins, RL Project Lead
Ronald Koll, ORP Project Lead

Tri-Party Agreement

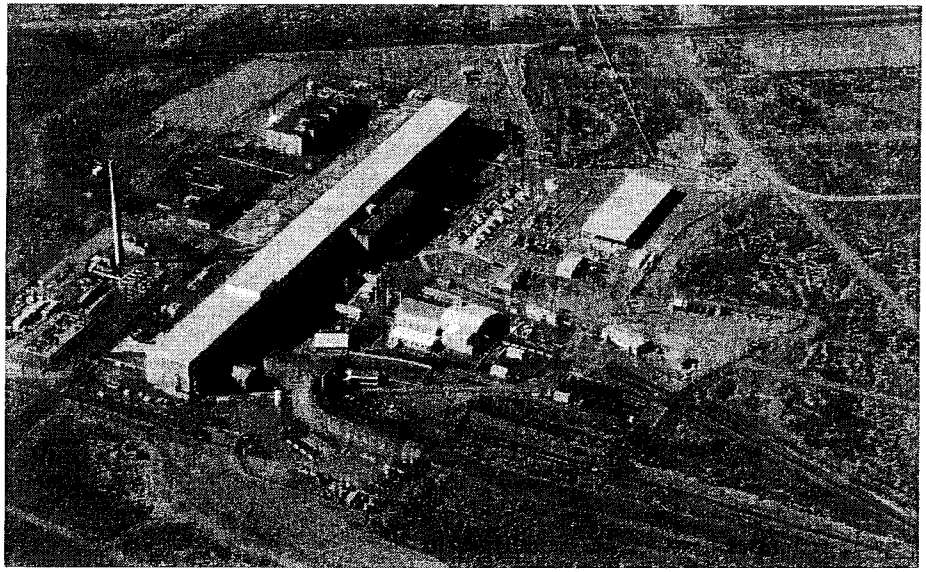
Land Disposal Restrictions Report
(Tri-Party Agreement Milestone M-26-01)
April 21, 2011

- Accomplishments
  - CY 2010 LDR Summary Report prepared
  - Site-specific LDR variance request for 42 containers of high dose concreted (ANL) waste drafted

- Actions planned for the next six months
  - Submit CY 2010 LDR Summary Report
  - Start storage assessments of potential mixed wastes at IMUSTS not associated with a building
  - Submit site-specific LDR variance request for 42 containers of high dose concreted (ANL) waste

Department of Energy – Richland Operations Office

Tri-Party Agreement Quarterly Milestone Review M-91 Series



April 21, 2011

EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Significant Accomplishments of the Last Three Months

- M-091-03 Project Management Plan
  - Started preparation of annual revision due 06/30/11
  - Draft change package to combine this plan and the M-016-93 CERCLA Work Plan provided to Ecology and EPA

Significant Accomplishments of the Last Three Months

- M-091-40 Retrievably Stored Waste (CH)
  - Volume retrieved – 1047 m^3 (223 m^3 in the quarter)
  - Volume removed from trenches but not at a TSD – 547 m^3
  - Started retrieval in 218-E-12B
  - Resumed retrieval in 218-W-4B, Trench 11

- M-091-41 Retrievably Stored Waste (RH)
  - Total volume retrieved – 62 m^3 (61 m^3 in the quarter)
  - Volume removed from trenches but not at a TSD – 18 m^3

Significant Accomplishments of the Last Three Months

- M-091-42 MLLW (CH, small container)
  - Volume shipped – 404 m^3 (since 09/15/10) (62 m^3 in the quarter)
  - Volume treated – 319 m^3 (since 09/15/10) (22 m^3 in the quarter)
  - Sodium-contaminated debris waste shipped offsite for treatment
  - 22 m^3 in storage

- M-091-43 MLLW (RH and large container)
  - Volume shipped – 171 m^3 (since 09/15/10) (70 m^3 in the quarter)
  - Volume treated – 131 m^3 (since 09/15/10) (62 m^3 in the quarter)
  - 312 m^3 in storage (increase due to TRU waste dropouts)

Significant Accomplishments of the Last Three Months

- M-091-44 TRUM Waste (RH and large container)
  - Volume shipped – 458 m^3 (215 m^3 in the quarter)
  - Volume repackaged – 301 m^3 (149 m^3 in the quarter) resulting in 140 m^3 of certifiable waste
  - Volume assayed – 123 m^3 (81 m^3 M/LLW, 42 m^3 TRU/M waste)
  - 5,743 m^3 in storage

Significant Accomplishments of the Last Three Months

- M-091-46 TRUM waste (CH, small container)
  - Volume shipped to WIPP or AMWTP – 879 m^3 (216 m^3 in the quarter)
  - Volume repackaged – 794 m^3 (68 m^3 in the quarter)
  - Central Characterization Project certification program approved
  - 1,631 m^3 in storage

Fiscal Year 2011 (through March) 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	3,826.1	3,826.1	4,193.5	0.0%	-9.6%
Waste Receiving and Packaging Facility (WRAP)	4,317.6	4,590.5	4,109.5	6.3%	10.5%
T Plant	5,531.8	5,530.0	5,318.9	0.0%	3.8%
MLLW Treatment	7,738.5	3,253.2	3,843.0	-58.0%	-18.1%
TRU Waste Retrieval	17,468.7	16,577.8	22,538.4	-5.1%	-36.0%
TRU Waste Repackaging	9,080.8	8,479.8	9,382.2	-6.6%	-10.6%
TRU Waste Disposition	7,270.7	8,605.9	6,580.5	18.4%	23.5%
Project Management	9,055.1	9,055.0	10,843.7	0.0%	-19.8%

Variance Analysis

- FYTD Schedule Variance: The negative variance for MLLW Treatment is due to the lack of feed from retrieval. The positive variance for TRU Waste Disposition is due to more efficient waste characterization.

- FYTD Cost Variance: The positive variance for WRAP is due to less support needed for waste characterization. The negative variance for TRU Waste Retrieval is due to the condition of the containers, resource needs to implement Next Generation Retrieval, and the need to address contamination issues. The negative variance for TRU Waste Repackaging is due to actions necessary to address beryllium concerns and liner issues. The negative variance for Project Management is due to additional efforts needed to address above issues.

Actions Planned for Next Six Months

- M-091-03 – Submit 2011 Project Management Plan
- M-091-40
  - Complete retrieval in 218-W-3A, Trench 17; 218-W-4B, Trench 11, and 218-E-12B
  - Resume retrieval in 218-W-4B, Trench 7
- M-091-42 - Continue treatment
- M-091-43 – Continue treatment
- M-091-44 – Continue repackaging waste into a certifiable waste form at Permafix Northwest
- M-091-46
  - Continue repackaging at WRAP and T Plant
  - Continue shipments to WIPP

SOIL AND GROUNDWATER REMEDIATION PROJECT MILESTONE REVIEW

M-015-00, M-016-00, M-024-00, M-037-00, M-085-00

Tri-Party Agreement

U.S. Department of Energy
U.S. Environmental Protection Agency
State of Washington, Department of Ecology
Second Quarter FY11
April 21, 2011

Quarterly Milestone Summary (January – March 2011)

Completed TPA Milestones

- M-091-40L-029 – Completed on 1/27/2011 – Submit October to December 1st Quarter FY-11 Burial Ground Sample Results. Email from D. Black with Mike Collins DOE/RL concurrence on 1/28/11 that this milestone was completed per the PMM meeting on 1/27/11.
- M-015-60 – Completed on 3/25/2011 – If an amendment to the 100-NR-1/2 Record of Decision for Interim Action is issued, DOE shall submit an RD/RA Work Plan. Submitted to Ecology by RL (11-AMCP-0123) .

Approved Change Requests

- M-015-11-01 – Approved on 3/12/2011 – Modification of *Hanford Federal Facility Agreement and Consent Order* (HFFACO) M-015-2-T01 Target Date – A day-for-day slip of 100-NR-1/2 FS/PP from 2/31/2011 to 9/17/2012.

Milestone Status

TPA Number	Commitment Date	Milestone 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-015-00D	**12/31/12**	**Submit PP for all 100 & 300 Area OUs to Complete RI/FS Process**	**On Schedule**
M-015-21A	12/31/12	Submit 200-BP-5 and 200-PO-1 OU FS Report and PP(s) to Ecology	On Schedule
M-015-38B	04/30/12	Submit a Revised FS Report & Revised PP(s) for 200-CW-1, 200-CW-3, and 200-OA-1 OUs for Waste Sites in the Outer Area of the CP to EPA	On Schedule
M-015-60	03/29/2011	Submit RD/RA Work Plan, if 100-NR-1/2 ROD Amend. is Issued	**COMPLETE**
M-015-62-T01	12/31/11	Submit FS/PP for 100-NR-1/2 OUs Including GW and Soil	On Schedule
M-015-64-T01	12/17/11	Submit RI/FS Report and PP for 100-FR-1/2/3 and 100-IU-2/6	On Schedule
M-015-66-T01	09/21/11	Submit RI/FS Report and PP for 100-KR-1/2/4 OUs for GW and Soil	On Schedule
M-015-68-T01	11/30/11	Submit RI/FS Report and PP for 100-BC-1/2/5 OUs for GW and Soil	On Schedule
M-015-70-T01	11/24/11	Submit FS Report and PP for 100-HR-1/2/3 and 100-DR-1/2 OUs	On Schedule
M-015-72-T01	12/31/11	Submit RI/FS Report and PP for 300-FF-2/5 OUs for GW and Soil	On Schedule
M-015-82B	08/01/2011	Initiate 200-BP-5 Aquifer Tests Within 6 months of TTP Approval	On Schedule
M-015-90	06/30/11	Submit Revised RFI/CMS and RI/FS Work Plan for 200-IS-1 to Ecology	On Schedule
M-015-91A	12/31/11	Submit RI/FS Work Plan for the 200-WA-1 OU (200 West Inner Area) to EPA	On Schedule
M-015-91B	06/30/13	Submit FS Report and PP for 200-WA-1 OU (200 West Inner Area) to EPA	On Schedule
M-015-92A	12/31/12	Submit RFI/CMS and RI/FS Work Plan for the 200-EA-1 OU (200 East Inner Area) to Ecology	On Schedule
M-015-92B	06/30/14	Submit CMS & FS Report(s) & Proposed CA Decision(s)/PP(s) for 200-EA-1 & 200-IS-1 OUs (CP 200 East Inner Area) to Ecology	On Schedule
M-015-93A	12/31/11	Submit Revised RFI/CMS and RI/FS Work Plan for 200-SW-2 to Ecology	On Schedule

Milestone Status

TPA Number	Commitment Date	Milestone 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 (cont.)			
M-015-93B	12/31/16	Submit RFI/CMS & RI/FS & Proposed CA Decision/PP for 200-SW-2 to Ecology	On Schedule
M-015-110A	09/30/12	Submit RFI/CMS & RI/FS Work Plan for 200-DV-1 OU to Ecology. The Work Plan shall include technology screening that identified technologies applicable for characterization, treatment, and monitoring of deep vadose zone contaminants.	On Schedule
M-015-110B	09/30/15	Submit CMS & FS & PP/Proposed CA Decision for 200-DV-1 OU to Ecology	On Schedule
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	On Schedule
M-016-00 – Complete Remedial Actions for all Non-Tank Farm and Non-Canyon Operable Units			
M-016-110-T01	12/31/12	Take Actions to Contain or Remediate Hexavalent Cr 100A GW Plumes	On Schedule
M-016-110-T02	12/31/20	Take Actions Such That Hexavalent Cr Meets Drinking Water Stds.	On Schedule
M-016-110-T03	12/31/16	Take Actions to Contain Sr-90 GW Plume at 100-NR-2 OU	On Schedule
M-016-110-T04	12/31/16	Implement Remedial Actions in all 100A RODS for GW OUs	On Schedule
M-016-110-T05	12/31/15	Implement System to Meet Drinking Water Stds. for U at 300-FF-5 OU	On Schedule
M-016-111C	12/31/11	Expand P&T System at 100-HR-3 OU to 800 gpm Capacity	On Schedule
M-016-119-T01	12/31/20	Remedy in Place to Contain GW Plumes in 200 NPL Area	On Schedule
M-016-120	12/31/11	GW Treatment System <50 gpm for Tc-99 Plume at S/SX Tank Farm	On Schedule
M-016-122	12/31/11	Begin Phase 1 Operation of 200W Pump and Treat System	On Schedule
M-016-200A RL-40	09/30/17	Complete U Plant Canyon (221-U) Demolition in accordance w/ RD/RAWP	On Schedule
M-016-200B RL-40	09/30/21	Complete U Plant Canyon (221-U) Barrier Construction in accordance w/ the RD/RAWP	On Schedule

Milestone Status

TPA Number	Commitment Date	Milestone Title	Status
M-024-00 – Complete Well Installations with RCRA/CERCLA Requirements			
M-024-58D	06/01/11	Initiate Discussions of Well Commitments	On Schedule
M-024-58E	06/01/12	Initiate Discussions of Well Commitments	On Schedule
M-024-58F	06/01/13	Initiate Discussions of Well Commitments	On Schedule
M-024-62	12/31/11	DOE Shall Complete Construction of all Wells Listed	On Schedule
M-024-62-T01	08/01/11	Conclude Discussions of Well Commitments	On Schedule
M-024-63	12/31/12	DOE Shall Complete Construction of all Wells Listed	On Schedule
M-024-63-T01	08/01/12	Conclude Discussions of Well Commitments	On Schedule
M-024-64-T01	08/01/13	Conclude Discussions of Well Commitments	On Schedule
M-024-64	12/31/13	DOE Shall Complete Construction of all Wells Listed	On Schedule
M-037 – RCRA Closures			
M-037-02	06/30/2014	Submit Revised Closure Plans to support TSD closure for five (5) TSD Units: 207-A South Retention Basin, 216-A-29 Ditch, 216-A-36B Crib, 216-A-37-1 Crib, and 216-B-63 Trench.	On Schedule
M-037-03	04/30/2012	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
M-037-10	09/30/2020	Complete Unit-Specific Closure Requirements According To The Closure Plan(s) For seven (7) TSD Units: 207-A South Retention Basin, 216-A-29 Ditch, 216-A-36B Crib, 216-A-37-1 Crib, 216-B- 63 Trench, Hexone Storage and Treatment Facility (276-S-141/142), and 241-CX Tank System (241-CX-70/71/72).	On Schedule
M-037-11	09/30/2016	Complete unit-specific closure requirements for two (2) TSD Units: 216-B-3 Main Pond system and 216-S-10 Pond and Ditch.	On Schedule

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 RL 40	09/30/12	Submit Change Package to establish date for major Milestone M-85-00	On Schedule
M-085-10A RL 30	12/31/11	Submit RI/FS Work Plan for 200-CB-1 (B Plant Canyon/associated past practice waste site) to Ecology	On Schedule
M-085-20A RL 30	09/30/15	Submit RI/FS Work Plan for 200-CP-1 (PUREX Canyon/associated past practice waste site) to Ecology	On Schedule
M-085-30A RL 30	12/31/17	Submit RI/FS Work Plan for 200-CR-1 (REDOX Canyon/associated past practice waste site) to EPA	On Schedule
M-085-50 RL 40	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-085-51 RL 40	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-085-60 RL 40	03/31/18	Complete EE/CA Report(s) for all Tier 2 Facilities listed in Appendix J	On Schedule

Accomplishments – 2nd Quarter FY2011

- **Pump and Treat Operations**
  - Treated 190.02 million gallons on the River Corridor
  - Treated 53.1 million gallons on the Central Plateau
- **Sampling**
  - 2,152 samples collected from 492 well locations
  - 422 aquifer tube samples collected from 160 aquifer tubes
- **Outer Zone**
  - 82,389 tons of soil removed
  - With ARRA funds, workers in the Outer Zone have finished planting over 1,100 pounds of seed and 280,000 pounds of mulch to re-vegetate a total of 166 acres where more than 437,000 tons of contaminated soil removed from 12 contaminated waste sites
  - 190.8 acres remediated
  - 7 waste sites complete
- **100K Waste Sites**
  - 30,647 tons removed

Significant Accomplishments

200-UP-1

- Completed placement of structural fill and concrete work, and initiated the installation of steel for the S-SX transfer building.
- The S-SX transfer building was erected and enclosed with the exception of one section to allow access for the transfer tank.
- The SAP for S-SX extraction and monitoring wells was approved.

200-MG-1

- The SAP Rev 1 was approved by EPA and Ecology on January 10, 2011.
- The following sites have been completed: 200-E-110, 600-37, 600-51, 600-262, and UPR-600-21.

Soil Vapor Extraction System

- The soil vapor extraction units (PW-1 and PW-2) were restarted on March 1, 2011, as planned.

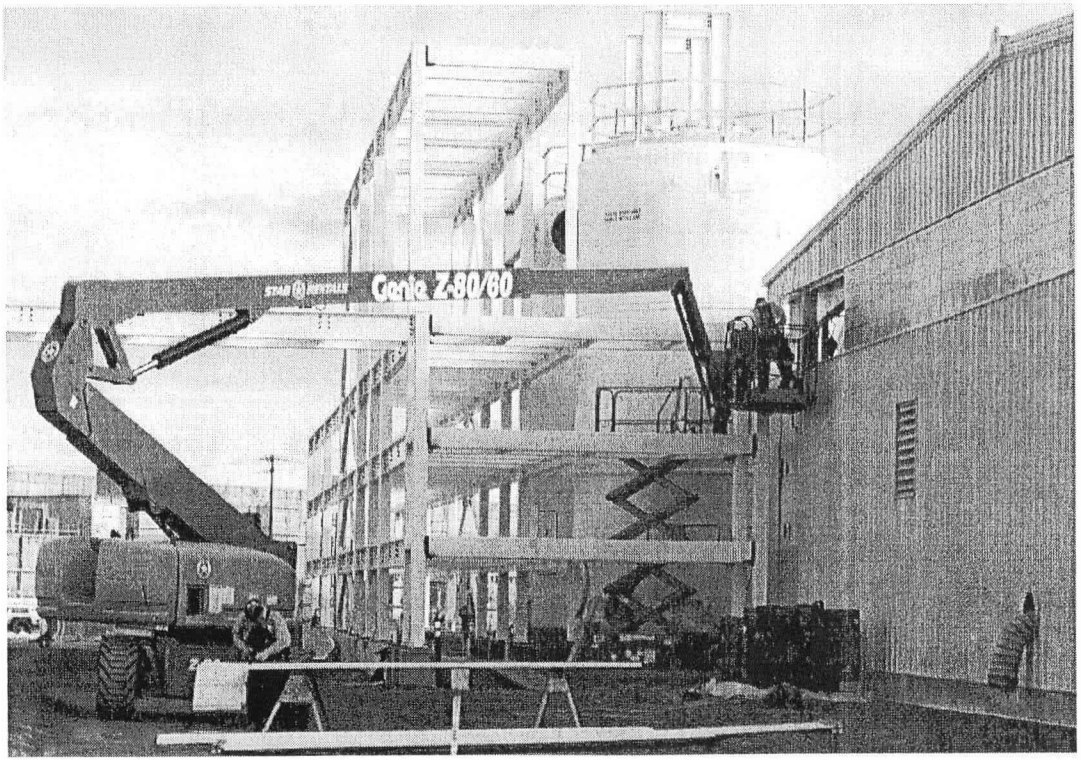
U Plant Canyon

- The U Plant barrier screening criteria was approved by EPA on January 10, 2011.
- Started grout test pours March 2011.

Significant Accomplishments

200 West Area Groundwater Treatment Facility

- All slab on grade pours complete February 10, 2011. Approximately 8,900 cubic yards.
- Completed facility concrete, enclosed radiological and biological process buildings, and long-lead equipment installation.



<<< Construction of the Bio-Process Building for the 200 West Groundwater Treatment Facility.

Significant Accomplishments

200-BC-1

- The Desiccation Test progressed with the arrival of the desiccation front having reached the first set (three) of monitoring wells. All responses to date indicate the process is working as anticipated.

200-BP-5

- Issued the final 200-BP-5 Treatability Test Plan, Revision 1, and initiated the design of the extraction system.

200-CW-3

- The following sites have been complete: 216-N-1, -4, & -6 and 600-286-PL and 287-PL with the exception of possible revegetation.

200-PW-1/3/6 & 200-CW-5

- The Draft C PW-1/3/6 Feasibility study and the Draft A of the Proposed Plan for combined CW-5 and PW-1/3/6 was submitted to EPA on January 11, 2011. EPA comments were received on February 24, 2011. Comment responses were transmitted to EPA on March 28, 2011. Resolution of the outstanding issues for FS and the PP are currently underway.

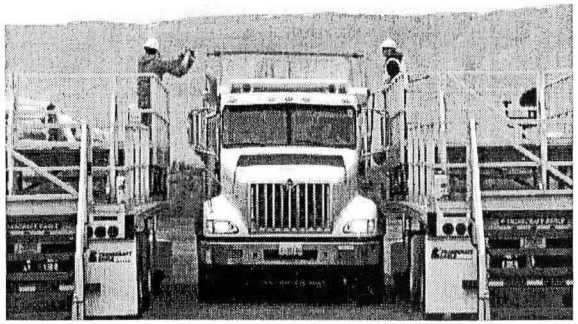
200 E Tier 2 Facilities

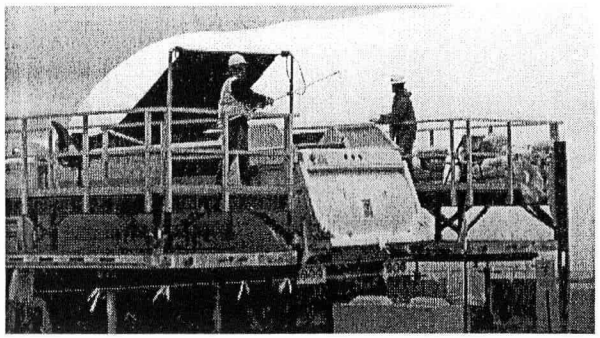
- Completed Action Memo
- RAWP for 209E was approved by RL and Ecology
- SAP for 209E was approved by Ecology and EPA

Significant Accomplishments

200-BC Control Area (BCCA)

- BCCA North Zone A (~140 acres):
  - The stockpile contains an estimated 139,000 tons.
  - 140 acres of Zone A has been remediated with hot spot removal ongoing.
  - Zone A CERCLA survey measurements have been completed for approximately 90%.





Workers tarping super dump trucks out at BCCA with new mobile platforms

Significant Accomplishments

200-ZP-1

- Final activated carbon, uranium and Tc-99 resin testing reports have been issued.
- 15 extraction and 5 injection wells have been installed at this time.
- The development of simulator based training is ongoing as is updated computer modeling which utilizes the latest depth-discrete groundwater data.

Railcars Disposition

- Draining liquid from the railcars and applying fixative is near complete.
- Wet grouting the railcars has commenced.

Multi-Increment Sampling

- The first site of MIS verification sampling is complete. All samples have been delivered to Ecology.

100-NR-2

- The Revision 1 Draft A NR-2 OU Interim Action Remedial Design/Remedial Action (RD/RA) Work Plan was transmitted to RL, and RL submitted the document to Ecology on March 25, 2011, meeting TPA Milestone M-015-60 (due March 29, 2010).
- The Rev. 0 100-N RI/FS Work Plan Addendum was released and approved by RL and Ecology on March 10, 2011. Following approval of the work plan addendum, the TPA Target Date M-15-62-T01 for the 100-N RI/FS Report and Proposed Plan is now set for September 17, 2012, as approved by RL and Ecology in TPA Change Number M-015-11-01.

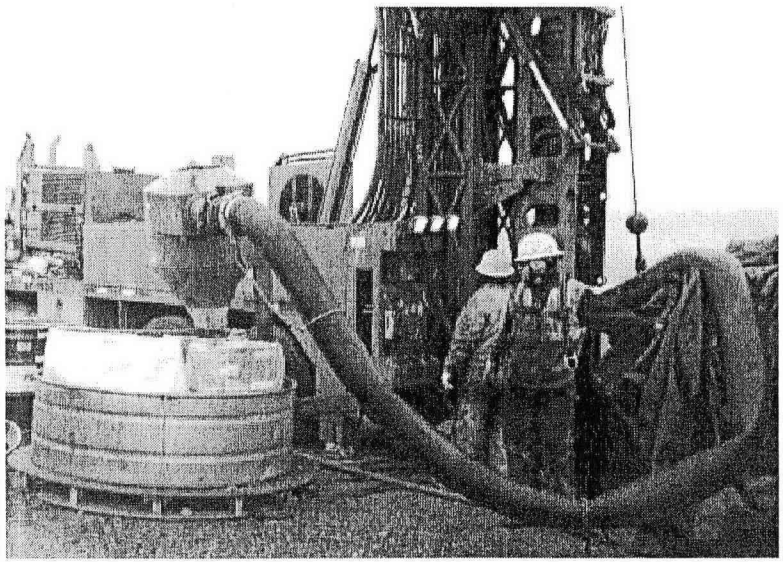
Significant Accomplishments

100-BC-5

- Construction of RI/FS wells C7783 and C7784 was completed.
- Sampling of three RI/FS test pits was completed. With this, all of the test pit excavation and sampling activities for the RI/FS are now complete.
- Drilling and sampling of the last of six RI/FS wells, C7785, was completed with the borehole advanced to a total depth (TD) of 153.5 ft bgs.

100-HR-3

- The new DX Pump-and-Treat System continued operating and completed fieldwork related to operations test procedure activities.
- Construction activities continued in order to add the DR-5 wells to the DX Pump-and-Treat System
- RI/FS borehole drilling and sampling was completed on all ten boreholes
- RI/FS well drilling and sampling continued with fourteen of fifteen wells completed.



A drilling rig in operation in the 100-HR-3 operable unit >>>

Significant Accomplishments

100-KR-4

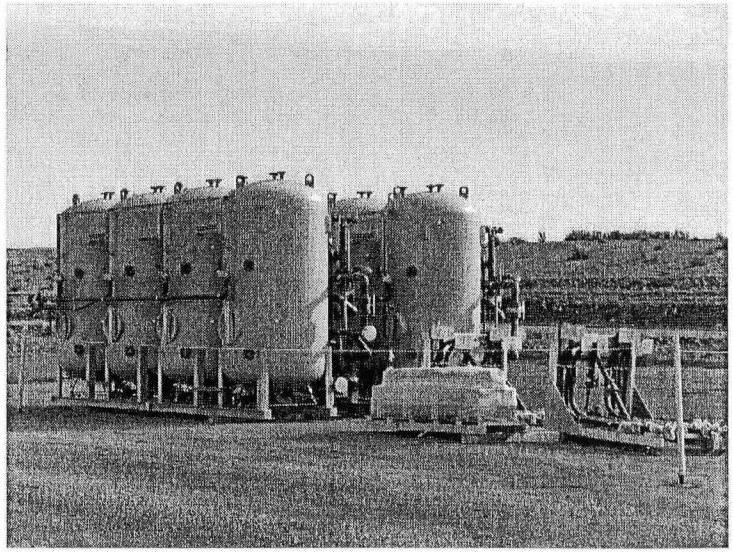
- KR-4 Pump-and-Treat System restarted on January 14, 2011 following Programmable Logic Controller (PLC) upgrades and well head modifications.
- RI/FS drilling and sampling for the thirteen RI wells completed.

100-DX P&T

- The new DX Pump-and-Treat System continued operating and commenced operations test procedure activities.

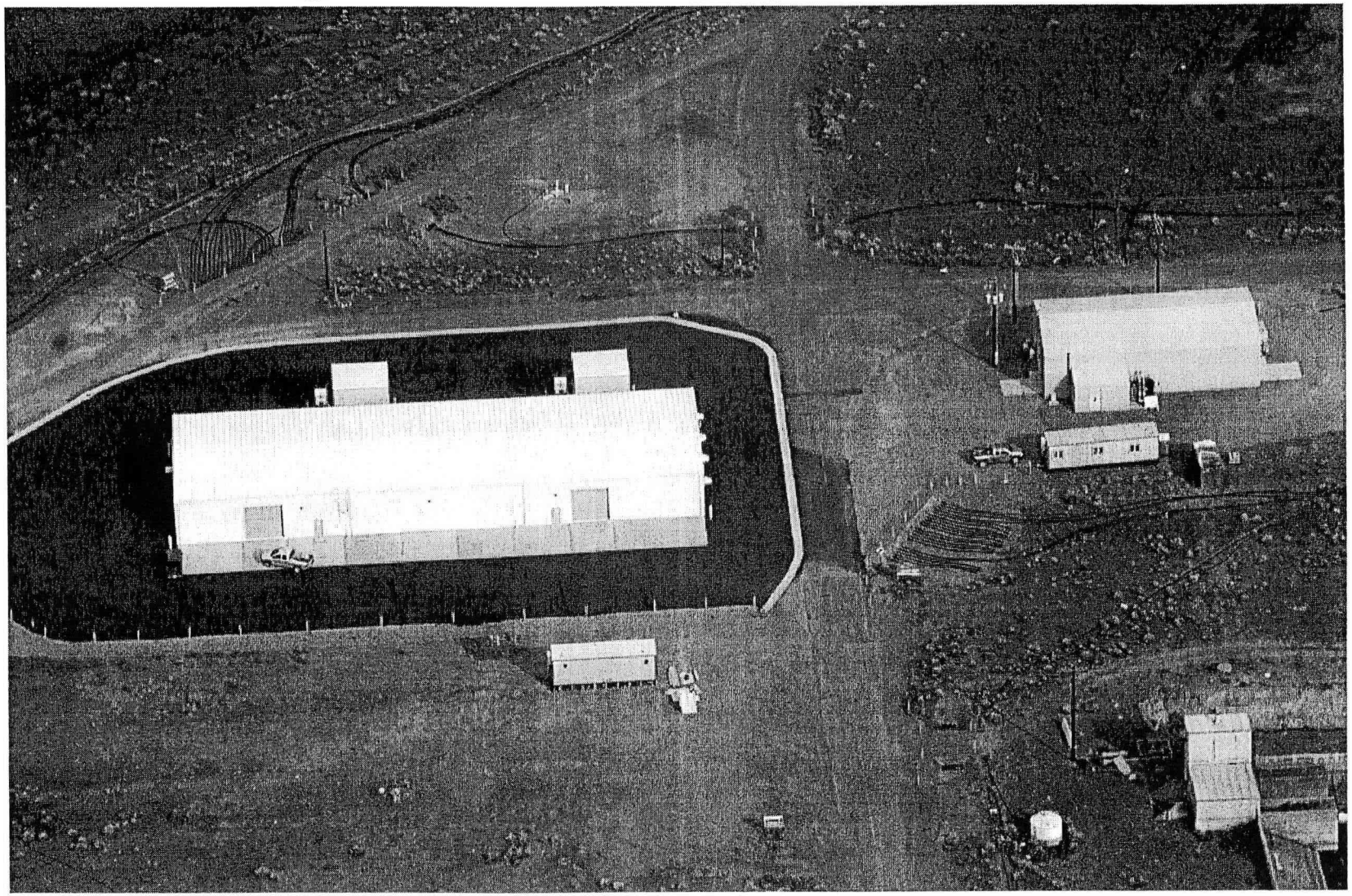
100-HX P&T

- Initiated equipment installation of 100HX P&T Process Building and Transfer.

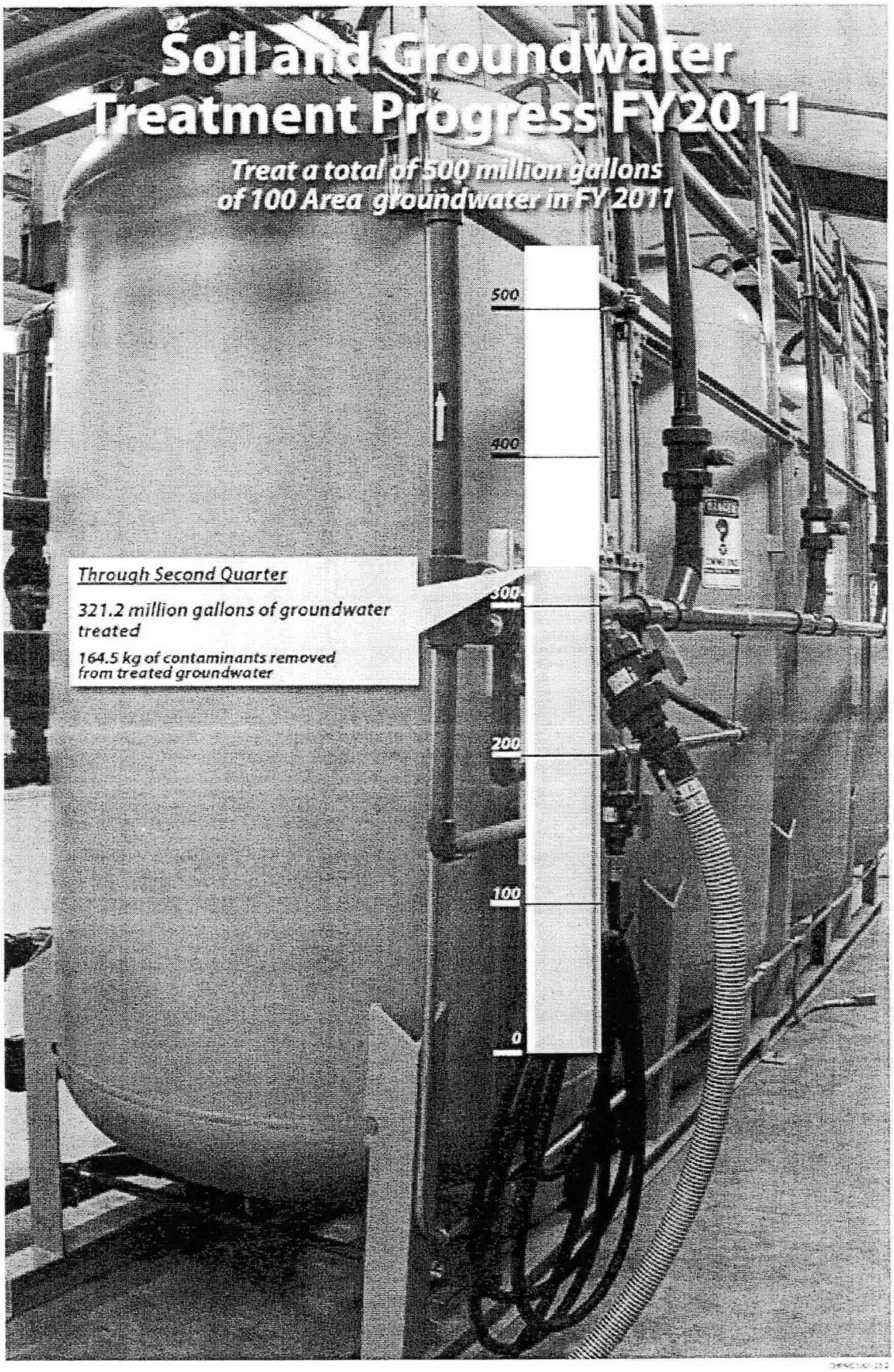


<<< *Last set of 2 ion exchange skids received at HX Process Building 2/03/11*

Significant Accomplishments



Aerial Photo of the 100-DX Groundwater Treatment Facility

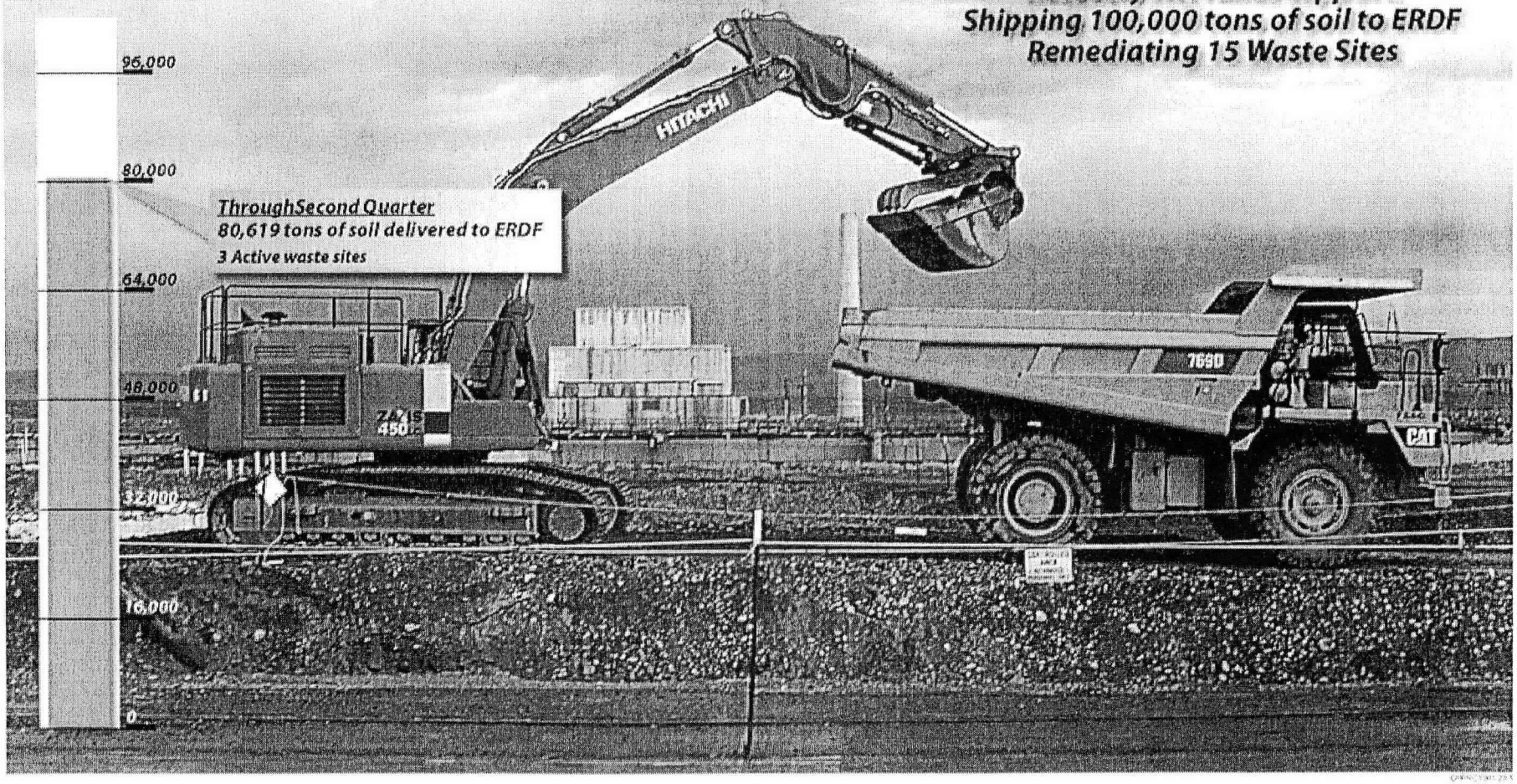


CH2MHILL
Plateau Remediation Company


CH2MHILL
Plateau Remediation Company
Soil and Groundwater RL-40
Waste Site Progress FY2011
Ship 162,000 tons of soil to ERDF
Remediate 24 Waste Sites
Through Second Quarter
171,762 tons of soil delivered to ERDF
14 Waste sites remediated
160,000
128,000
96,000
64,000
32,000
0
CAT

Soil and Groundwater RL-41 Waste Site Progress FY2011

Recovery Act funds support:
Shipping 100,000 tons of soil to ERDF
Remediating 15 Waste Sites



PROJECT BASELINE PERFORMANCE
Contract-to-Date
($M)

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)
ARRA RL-0030.R1.1 GW Capital Asset	114.3	114.1	122.2	(0.2)	-0.2	(8.1)	-7.1	164.8	178.4	(13.6)
ARRA RI-0030.R1.2 GW Operations	69.5	69.1	63.0	(0.4)	-0.6	6.1	8.8	76.4	79.9	(3.5)
ARRA Total	183.8	183.2	185.1	(0.6)	-0.3	-0.2	-1.1	241.2	258.3	(17.1)
Base	329.1	331.2	337.3	2.0	0.6	(6.1)	-1.8	1,274.2	1,227.0	47.2
Total	512.9	514.3	522.4	1.4	0.3	(8.1)	-1.6	1,515.5	1,485.3	30.1

Numbers are rounded to the nearest $0.1M.

PROJECT BASELINE PERFORMANCE
Contract-to-Date

ARRA
CTD Schedule Performance: (-0.6M/-0.3%)
All Variances are within Thresholds
ARRA RL-0030.R1.1 GW Capital Asset (-$0.2M)
All Variances are within Thresholds
ARRA RL-0030.R1.2 GW Operations (-$0.4M)
All Variances are within Thresholds

CTD ARRA Cost Performance: (-$2.0M/-1.1%)
The primary contributors to the ARRA CTD cost variance that exceed the reporting thresholds are:
ARRA RL-0030.R1.1 GW Capital Asset (-$8.1M)
EAC is greater than TPC.
ARRA RL-0030.R1.2 GW Operations (+$6.1M)
Drilling (+$2.9M)
Efficiencies and savings obtained in drilling for 100-NR-2, 100-HR-3, and 200-BP-5 wells. Cost efficiencies have been obtained through an aggressive drilling schedule with savings in support personnel, faster drilling methods, and shallower drilling depths for HR-3 wells than originally planned. Well decommissionings have also been completed for less than planned.
200-ZP-1 Operable Unit (+$1.0M)
Implementation of BCRA-030-11-003R0 and the transfer of BCWP from ARRA subproject R1.1 to ARRA subproject R1.2 without the corresponding cost has resulted in a temporary positive cost variance. It is anticipated that this positive cost variance will not remain at project completion.
Regulatory Decision and Closure Integration (+$1.7M)
Completing work scope more efficiently than planned, primarily in the areas of multi-incremental sampling (using existing documentation and direct haul rather than staging), and borehole drilling and landfill characterization (competitive subcontracting of drilling support and efficient field support).
PBS RL-30 UBS, G&A, and DD (+$2.1M)
The positive cost variance is discussed in Appendix C.

PROJECT BASELINE PERFORMANCE
Contract-to-Date

Base
CTD Schedule Performance (+$2.0M/+0.6%)
All Variances are within Thresholds.

CTD Cost Performance (-$6.1M/-1.8%)
Primary contributors to the CTD negative cost variance that exceed the reporting thresholds are as follows:
100-NR-2 OU (-$1.6M)
Chemical treatment and maintenance scope, jet grouting pilot test work, RI/FS Work Plan and Interim Proposed Plan Reporting were performed more efficiently than planned leading to the positive cost variance.
200-ZP-1 Operable Unit (+$2.4M)
Major contributors to the variance are as follows:
Interim Operations reflects significant progress and cost underruns achieved to date for System Calibration
Design of the permanent hookup of well EW-1 was lower than planned as only minor changes were needed to an existing design
Cost for performing general operating and maintenance and minor modification activities have been lower than planned as the system has been running smoothly
Cost for collecting depth-discrete groundwater and soil samples during the installation of new wells was less than planned
Development of construction acceptance test plans are lower than planned
200 PW-1 OU (+$0.8M)
Labor and subcontract cost for general operations and minor modifications support is less than planned. In addition, efficiencies and savings experienced with the Soil Vapor Extraction (SVE) system testing prior to March 2010 and the completed removal of two SVE units.
Usage Based Services (-$1.6M)
Increased cost associated with training due to the additional ARRA work in FY2010 and fleet services costs that occurred in FY2009 and FY2010. Overruns will continue to be funds-managed within the S&GRP project.

PROJECT BASELINE PERFORMANCE
Contract-to-Date
($M)

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	157.6	154.9	142.7	(2.7)	-1.7	12.2	7.9	198.7	187.3	11.4
Outer Zone	70.8	67.3	55.7	(3.5)	-5.0	11.6	17.3	89.5	91.0	(1.4)
ARRA Total	**228.5**	**222.2**	**198.4**	**(6.3)**	**-2.7**	**23.8**	**10.7**	**288.3**	**278.3**	**10.0**
Base	57.7	57.9	51.9	0.2	0.4	6.1	10.5	757.8	741.7	16.0
Total	**286.2**	**280.1**	**250.2**	**(6.1)**	**-2.1**	**29.9**	**10.7**	**1,046.0**	**1,020.0**	**26.0**

Numbers are rounded to the nearest $0.1M.

PROJECT BASELINE PERFORMANCE
Contract-to-Date

ARRA

CTD Schedule Performance: (-$6.3M/-2.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-$2.7M) negative schedule variance is due to late award of the grout contract for U Canyon (-$2.8M) and delays with the 200E Administration Buildings (-$1.2M) due to bio-hazard and radiological control issues. Limited resources has also delayed 200W Administration Buildings (-$0.1M). This is offset by accelerating 209E demolition preparation, mobilization, and asbestos abatement (+$1.4M).

ARRA RL-0040.RI.2 Outer Zone D&D (-3.5M) unfavorable schedule variance is primarily due to delay of work on selected waste sites pending finalization of site priorities (-$2.8M); delays with cultural/ecological reviews on the North Slope (-$0.4M); and minor accounts outside the threshold (-$0.3M).

CTD Cost Performance: (+$23.8M/+10.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+$12.2M) favorable cost variance is largely due to favorable performance of the Cold and Dark teams and the Sampling and Characterization/Waste Identification Form teams (D4) (+$3.3M), overhead allocations (+$7.7M), less for Program Management than planned (+$1.2M), efficiencies at U Canyon (D4) (+$0.8M), less resources than planned for C-3 Sampling (+$0.7M) and 200E Administration (+$1.2M), lower than planned costs for capital equipment (D4) (+$2.7M), less asbestos abatement required for 200W buildings (+$3.5M), offset by increased material and equipment costs, increased use of masks and respirators due to the unexpected asbestos levels in the ancillary buildings in U Ancillary (D4) (-$8.0M), coupled with increased insulator staff and overtime to recover schedule, 209E Project (-$0.7M). Minor accounts not within threshold (-$0.2M).

ARRA RL-0040.RI.2 Outer Zone D&D (+$11.6M) favorable cost variance is due to efficiencies in ALE and North Slope Facilities D&D (+$4.9M) and Outer Area waste sites (+$7.9M). The waste site favorable cost-to-date variance is primarily due to an O-Zone RTD Waste Sites adjustment (pass back) to ERDF waste disposal costs reflecting the operational efficiencies of the super dump trucks. Within the waste sites area, this favorable cost variance is partially offset by higher than planned costs associated with remediation of pipelines. A negative cost variance is associated with increased costs for the 212N/P/R Project (-$1.0M) due to the walls of the basins being much thicker than estimated.

PROJECT BASELINE PERFORMANCE
Contract-to-Date

Base

CTD Schedule Performance: (+$0.3M/+0.4%)

All Variances are within Thresholds.

CTD Cost Performance: (+$6.1M/+10.5%)

Balance of Site (facilities and others) (+$6.1M) favorable cost variance is associated with recognized efficiencies for demolition of the Industrial 7 Project (D4) (+$0.6M) as a result of utilization of existing site equipment and materials, surveillance and maintenance costs (D4) (+$1.5M) less than expected, completion of the sampling of Cell 30 with less resources than planned (+$0.9M), Program Management utilizing less resources (+$1.4M), capital equipment (+$0.3M), Usage Base Services (+$0.1M), and underrun in overhead allocations (+$1.3M).

Planned Activities

Next 6 Months

100-HR-3

- Complete the HX pump and treat system (expected in September 2011). This will bring the total HR-3 treatment capacity to 1400 gpm.
- Complete the fieldwork for the RI/FS at HR-3 OU, and complete the decisional draft of the RI/FS report

200-BP-5

- Complete Treatability Test design and initiate.
- Complete the Draft A Remedial Investigation (RI) Report.
- Initiate preparation of the 200-BP-5 and 200-PO-1 Combined FS Report.

200-PO-1

- Complete the RI Report.
- Initiate preparation of the 200-BP-5 and 200-PO-1 Combined FS Report.

200-SW-1

- Revise the RI/FS Work Plan for 200-SW-1.

200-UP-1

- Complete the RI/FS Report and Proposed Plan.
- Complete the 200-UP-1 Final ROD.
- Initiate the final remedy RD/RA WP.
- Continue construction of the interim S-SX Extraction System for the Tc-99 plume and complete extraction well drilling.

Planned Activities

Next 6 Months

200-ZP-1 / 200-PW-1 SVE

- Complete construction of the new 200 West Area GW Treatment Facility and begin CAT and ATP.
- Continue ZP-1 interim P+T operations and PW-1 SVE operations.
- Complete simulator-based training program and begin training NCOs on new treatment facility.

200-MG-1/2

- Implement the 200-MG-1 RAWP and SAP for added 37 Outer Area Waste.

200-IS-1

- Complete Draft A of revised RFI/CMS & RI/FS Work Plan for 200-IS-1.
- Receive comments from Ecology on the Draft A Work Plan.

200-PW-1/3/6 and 200-CW-5

- Finalize 200-PW-1/3/6 FS.
- Finalize 200-CW-5 FS.
- Finalize 200-CW-5 and 200-PW-1/3/6 PP.
- Hold Public Comment period for 200-CW-5 and 200-PW-1/3/6 PP.
- Prepare and finalize 200-CW-5 and 200-PW-1/3/6 ROD.

200-DV-1 and Treatability Testing

- Complete the field drying portion of the Tc-99 desiccation test.
- Complete the Deep Vadose Zone Technologies Public Information Exchange.
- Complete the waste site DQO process.

Planned Activities
Next 6 Months

BCCA Zone A Complete
- A total of 140 Acres.
- Disposition stockpiled soil to ERDF.

Outer Zone Complete
- Complete 13 additional waste sites.

TSD Closure Plan – Hexone Storage and Treatment Facility
- Resolve Ecology comments on the Plan.

200-WA-1/200-BC-1
- Complete Draft A RI/FS Work Plan.

200-CW-3
- Complete Remedial Action Report for 200-CW-3 OU.