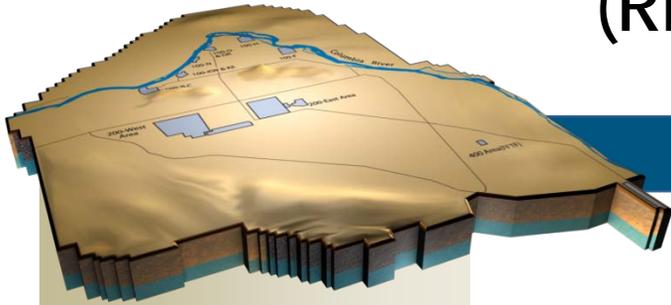


Section E Nuclear Facility D&D, Remainder of Hanford (RL-0040)

Monthly Performance Report



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6652D Tank Demolition from Upper ALE

April 2010
DOE/RL-2008-69, Rev. 18
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Completed U Plant Ancillary facilities asbestos abatement in 224U and 224UA. Final preparations to begin demolition are in progress.

The 212-N/P/R building areas were backfilled and contoured and demobilization activities were completed. The final report is being prepared.

Completed lower Arid Lands Ecology (ALE) structures demolition. Completed Cold & Dark utility isolation and demolition preparation activities on six upper ALE structures. Debris pile sites cleanup activities are continuing.

Equipment size reduction activities are continuing for U Canyon following crane repairs of the electrical collectors

Completed cold and dark utility isolation activities on three buildings for the 200E Project and completed demolition preparation activities on five structures.

Remediation activities continued in the Outer Zone at BC Control area, CW-3 waste sites, and Model Group (MG)-1 waste sites. BC Control Area remediated approximately 21,800 tons of soil in April; approximately 25.5 acres of BC Control Area, Zone A, have been cleared to date. In Zone B, approximately 850 acres have been radiologically surveyed. Excavation at one CW-3 waste site (216-N-4) continued with approximately 6,700 tons of soil removed during April. Sampling/surveys have been completed on eleven MG-1 sites. Initial excavation for MG-1 site 600-40 was completed and initial verification samples were collected; the samples are being analyzed.

Base

Planned surveillance and maintenance (S&M) activities continue.

Implemented a Baseline Change Request for disposition of the D-10 tank in Cell 30 for movement to T Plant.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
10-EMS-D&D-OB2-T2	Mitigate spill impacts	1) Develop spill management tools for routine activities (building demolition and S&M)	03/31/10	Complete
		2) Evaluate the need for lower tier project procedures to implement the PRC spill response procedure	04/30/10	Complete
		3) Develop and provide awareness, prevention, response and mitigation training to >85% of project personnel as related to spill response	05/30/10	Complete
		4) Review and validate pre-designations for commonly used chemicals at the facility	06/30/10	On Schedule
		5) Incorporate new spill requirements into applicable procedures/work packages based upon issuance of spill response procedure	04/30/10	Complete
		6) Evaluate the need for a system to pre-designate new chemicals	06/30/10	On Schedule

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	7	N/A
First Aid Cases	13	78	<p>04/05 U Ancillary RCT twisted left ankle while walking on asphalt. Worker was taken to AMH for evaluation. AMH gave worker a splint and released without restrictions. (20827)</p> <p>04/07 200E Pipefitter had a minor 'pinched finger' while working with cast piping. Employee and supervisor agreed that self-treat was appropriate. (20801)</p> <p>04/13 Employee reported having neck and shoulder pain from driving a water wagon. Employee was taken to AMH, provided first aid treatment, and returned to work without restriction. (20853)</p> <p>04/14 BOS Teamster took off sweatshirt and noticed an abrasion on right forearm. Worker was moving boxes when the abrasion was sustained. Worker went to AMH where wound was cleaned and returned to work without restriction. (20882)</p> <p>04/15 U Ancillary Insulator observed a scratch on left index finger. Employee and supervisor agreed that self-treat was appropriate. (20879)</p> <p>04/15 U Ancillary Insulator has a left shoulder strain due to lifting bags. Worker was taken to AMH and given instructions to use ice packs, take OTC non-prescription strength meds, and a restriction that did not impact regular job duties. (20858)</p> <p>04/19 BOS IH was retrieving equipment for use and slipped on some water on the floor. Worker did not fall, however worker jarred back and sustained a back strain. Worker was taken to AMH and was returned without restrictions. (20862)</p> <p>04/19 Three ironworkers voiced concerns over the taste and smell of dust that could contain bird droppings after doffing respiratory from a dive into the 284E powerhouse. The individuals were taken to AMH for evaluation. The workers were returned to work without restrictions. (20864, 20865, 20868)</p> <p>04/16 Employee received strain when performing lifting duties. Questioned at AMH and released with no restrictions. (20860)</p> <p>04/20 ALE D&D worker scratched forearm on barbed wire. Worker was wearing gloves at the time of injury. Worker was taken to AMH for treatment was given a Tetanus shot and returned to work with no restrictions. (20870)</p> <p>04/29 221U RCT bumped head in crane cab while completing weekly CAM checks. Initially felt ok, however later got a headache and started feeling dizzy. Went to AMH for evaluation and was determined to have a mild concussion. Given over the counter medication and returned to work without restrictions. (20897)</p>
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

ARRA

- U Plant Regional Closure Zone (U Ancillary Facilities D&D)
 - Continued demolition preparation activities in 224U and 224UA.
 - Completed asbestos abatement activities in 224U and 224UA.
- U Canyon Demolition and Cell 30 Disposition
 - Equipment size reduction activities continue with 85% of the large items dispositioned.
 - Implemented the Baseline Change Request for the disposition of Cell 30.
 - A Statement of Work (SOW) has been placed for the cask needed to ship the T-10 tank to T Plant.
 - Significant repairs were made to the bridge crane electrical system.
- 212-N/P/R Buildings D&D
 - Completed backfill and contour of all three footprints. Response Action Completion Report (RACR) for building removal has been prepared and routed through internal review. Comment resolution is underway. RL review and comment period to follow.
- 200E Project
 - Began 209E characterization and Cold and Dark planning activities. Started asbestos abatement in 272E.
- 200-CW-3 Waste Sites
 - Excavation of the second remove, treat, and dispose (RTD) site (216-N-4) continued in April. Approximately 19,300 tons of soil has been removed and transferred to the Environmental Restoration Disposal Facility (ERDF).
 - Preparation of the response action completion documentation for waste site 216-N-1 is underway.
- ALE D&D
 - Completed demolition activities on the lower ALE facilities.
 - Completed asbestos abatement activities on Upper ALE facilities.
 - Continued debris pile removal on lower ALE.
 - Completed demolition preparation on six upper ALE facilities.
- BCCA Waste Site Remediation
 - Remediation using super dump trucks continued with approximately 100,000 tons cumulative to date of soil removed and transferred to ERDF.
 - As a result of the helicopter survey and on-going radiological surveys per the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), approximately 850 acres in the 6.7 square mile Zone B have been radiologically surveyed.
- MG-1
 - Analysis of sampling data for 600-51 indicates RTD is not required. Closure documents for site 600-51 have been prepared and undergone internal review. Comment resolution is in progress with RL review targeted for the second week of May.
 - Waste site closure documentation for 200-E-101 was completed, submitted to RL for approval.
 - Initial excavation for site 600-40 was completed and initial verification samples were collected; the samples are being analyzed.
 - The Action Memorandum (AM) for the next MG-1 sites was approved April 15, 2010. The Remedial Action Work Plan (RAWP) was updated to include the 37 waste sites added with the approved AM, and provided to RL for informal review. RL comments received informally on April 29. Sampling Analysis Plan (SAP) has been similarly revised and is in internal review, with RL review planned for May.
 - Site 600-218 Confirmatory Sampling No Further Action (CSNFA) sample results indicate RTD is

required. Additional sampling was performed to evaluate the extent of RTD. RTD planning is in process. Cultural review is underway.

- Verification sampling of site 600-36 was performed in February to determine whether remediation was complete. Subsequently, additional excavation and sampling have been performed. The latest post-RTD sampling results for site 600-36 indicated that additional excavation is still required.
- CSNFA sampling of site 600-262 was performed at depth utilizing an auger. Sampling analysis indicates that no further field activity is required.
- Sampling of the CSNFA site 600-38 was completed with results indicating RTD will be required. RTD design and planning are underway.
- The Sampling Instruction (SI) was issued for site 200-W-33 and sampling was performed on March 16, 2010. Sample analyses indicate that RTD is required.
- Confirmatory sample instruction for 216-S-26 were prepared.
- The SI was issued for site 600-37 and sampling is ongoing.

MAJOR ISSUES

Issue Statement – Determination of a disposition path for the D-10 tank in Cell 30 has potential to be major impact on the U Canyon disposition schedule.

Corrective Action –A Baseline Change Request was developed and approved to remove the D-10 tank to T Plant.

Status –The BCR was approved this month.

Issue Statement – The contamination in BC Control Area is more wide spread and deeper than indicated in the Engineering Evaluation/Cost Analysis.

Corrective Action – CHPRC is utilizing overtime and preparing a baseline change request.

Status – BC Control Area remediation is continuing.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk

 Working - No Concerns
 Working - Concern
 Working - Critical

 Increased Confidence
 No Change
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
D4-U-003: Planned U Plant Cell 30 Holdup Material Disposition is Outside Baseline Assumption	Sample Cell 30 tank contents early; develop Cell 30 disposition path to reflect sampling results.			Realized risk; tank content disposition different than baseline plan; Cell 30 tank to be removed and transferred to T Plant pending final disposition; BCR submitted and implemented.
D4-U-004: U Canyon Technical Approach Changes	Conduct detailed planning/engineering to identify areas of concern and to minimize schedule impacts.			Detailed planning in process; BCR in preparation.
D4-020: Unexpected Condition/Radiological Contamination at Industrial Facilities	Perform early radiological surveys.			No significant impacts at this time.
D4-042: Unexpected Site Conditions	Conduct early facility walkdowns and characterization activities to minimize schedule impacts; interview "old-timers" and compare recollections to historic records; conduct document searches to minimize potential for surprises.			No issues at this time.
D4-044: Unforeseen Waste Site Event	Perform routine surveillance & maintenance of waste sites, including herbicide applications and rad surveys; include allowance in baseline for corrective actions identified during routine surveillance.			No issues at this time.
D4-043: Unforeseen Facility Event Impacts Safety or Environment	Include corrective maintenance in baseline based upon historic experience; risk accepted without further mitigation.			No issues at this time.
WSR-006: Decision Document Approval Delays	Work with RL and regulators to establish priorities and need dates.			Continue to work with RL to finalize the NRDWL/SWL EA which is the critical path to accelerating the landfill cap construction.
WSR-007: More Extensive Contamination Than Expected	Cannot control contamination extent; no mitigation.			Risk level reflects project life worst case impact of \$60M; individual waste site risks are moderate.
WSR-008: No Action Waste Sites	Using L-8 table data; no mitigation.			Risk realized for 200-MG-1, 600-36, 600-218, UPR 600-12, and 600-38.
WSR-020: Ecological/Cultural Conditions Restrict Field Activities	Accelerate cultural reviews to minimize schedule impact if cultural resource mitigation is required prior to initiating remediation.			The Project is working this risk on a case by case basis with no issues currently identified.
WSR-021: Remediation Subcontractor Performance	Investigate contractor performance prior to contract award.			No issues identified at this time.
WSR-028: Unexpected Liquid in Pipelines/Tanks	Anticipate liquids in field work plans; include spill response plans in RD/RAWPs.			No issues identified at this time.
WSR-030: NRDWL Barrier (RCRA vs. ET-Mono)	Draft closure plan and L-8 table show ET-Mono; no mitigation.			Ecology comments on the draft closure plan indicates their acceptance of an ET Barrier. However, final acceptance of the ET cap requires public review and an associated permit modification.
WSR-031: NRDWL Cap - Learning Curve	Award contract which considers previous environmental barrier construction experience in the selection criteria. Assign full-time QA contractor to oversee barrier construction.			These criteria will be evaluated during contract award, which starts after the Closure Plan is submitted to the public for review.

PROJECT BASELINE PERFORMANCE

Current Month

(\$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 (%)
ARRA	9.2	10.3	10.9	1.1	11.7	(0.6)	-6.3
Base	<u>0.5</u>	<u>1.7</u>	<u>1.2</u>	<u>1.2</u>	221.3	<u>0.5</u>	29.8
Total	9.7	12.0	12.1	2.3	23.3	(0.1)	-1.0

ARRA

CM Schedule Performance: (+\$1.1M/+11.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D

The 209E Project (-\$0.2M) is slightly behind due to issues with Bio-Hazard and Radiological contamination issues. This is offset by a positive variance for U Canyon due to implementing the Baseline Change Request in April (+\$0.4M) and U Ancillary Project has been able to make-up schedule delays (+\$0.1M).

ARRA RL-0040.R1.2 Outer Zone D&D

The current month schedule variance is due to implementation of baseline change requests BCR-R40-10-005R0 and BCR-R40-10-007R0, which related to BCCA and 600 Area Old Central Landfill (600 OCL) (+\$1.4M) and delays in the start of design for the barriers over 600 Central Landfill and the Non-Radioactive Dangerous Waste Landfill (NRDWL) pending agreement on the closure plans (-\$0.6M). Also, the ALE Facilities (-\$0.2M) are behind due to the delayed start for the 614 Building demolition which is offset by the 212NPR Project (+\$0.2M).

CM Cost Performance: (-\$0.6M/-6.3%)

ARRA RL-0040.R1.1 U Plant/Other D&D

The U Ancillary Project current month overrun of (-\$0.6M) is due to using more resources than planned to recover schedule and inefficiencies related to delays from respirator operation issues and new scaffolding requirements. Also, the cost for additional trailers(-\$0.5M) contributed to the current month overrun as well as the 209E Project (-\$0.2M). This is offset by (+\$0.1M) with efficiencies gained with Cold and Dark and Waste Identification Form teams. Also, capital equipment costs were lower than budgeted (+\$0.1M) as well as the 200E Project (+\$0.6M)

ARRA RL-0040.R1.2 Outer Zone D&D

The current month unfavorable cost variance is primarily related to the purchase of additional gamma spectrometry survey equipment (-\$0.2M). Costs associated with the greater depth of contamination in the BC Control Area and the resulting larger volume of soil requiring removal and disposal were offset this month by a correction to previous ERDF charges which had been incorrectly assigned to this project. In addition, the 212-N/P/R Project (-\$0.9M) overrun is due to close-out documentation taking longer than planned and prior months costs for ERDF were incorrectly billed to the BC Control Area. This is offset by an underrun in the ALE Project (+0.8M) due to efficiencies with the lower buildings requiring less asbestos abatement than planned.

Base

CM Schedule Performance: (+\$1.2M/+221.3%)

The positive schedule variance is due to the implementation of a Baseline Change Request which moves the Cell 30 design and safety documentation to ARRA (+\$1.6M).

The current month unfavorable schedule variance in waste sites relates to the construction of the barriers for Central Landfill and the Non-Radioactive Dangerous Waste Landfill which is being delayed pending agreement on the closure plans (-\$0.4M).

CM Cost Performance: (+\$0.5M/+29.8%)

The cost variance is within reporting thresholds.

**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)
ARRA	117.6	113.2	96.5	(4.3)	-3.7	16.8	14.8	282.4	272.3	10.1
Base	41.8	41.4	35.4	(0.3)	-0.7	6.0	14.6	969.5	962.9	6.7
Total	159.4	154.6	131.9	(4.6)	-2.9	22.8	14.7	1,251.9	1,235.2	16.8

Numbers are rounded to the nearest \$0.1M.

ARRA

CTD Schedule Performance: (-\$4.3M/-3.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D

The negative schedule variance for the D4 Project is caused by late delivery of heavy equipment in the D4 capital equipment account (-\$0.8M), finalizing the grouting contract for U Canyon (-\$0.5M), delays with the 200E Administration Buildings (-0.9M) due to Bio-Hazard and Radiological Control issues, 209E (-\$0.4M) and U Ancillary Demolition (-\$0.1M) schedule delays due to asbestos abatement/respirator issues.

ARRA RL-0040.R1.2 Outer Zone D&D

The contract to date unfavorable schedule variance is primarily due to the greater depth of contamination in the BC Control Area and the resulting need to excavate and dispose of greater quantities of soil (-\$0.8M) delay in starting design of the Central Landfill and the Non-Radioactive Dangerous Waste Landfill (NRDWL) barriers pending agreement on the closure plans (-\$0.7M) and a combination of extensive regulatory agency review times on regulatory documents (AM and RAWP) and obtaining the characterization data needed for ERDF profiles prior to remedial activities (-\$0.5M). This is offset by the ALE Project (+\$0.4M) due to less asbestos abatement activities than planned.

CTD Cost Performance: (+\$16.8M/+14.8%)**ARRA RL-0040.R1.1 U Plant/Other D&D**

The favorable cost variance for the D4 Project is largely due to favorable performance of the cold and dark teams and the sampling and characterization/waste identification form teams (D4) (+\$2.8M), G&A and direct distributable allocations (+\$6.5M), less for Program Management than planned (+\$0.5M), efficiencies at U Canyon (D4) (+\$3.7M), less resources than planned for C-3 Sampling (+\$0.7M) and 200E Administration (+\$1.1M), lower than planned costs for capital equipment (D4) (+\$2.1M), 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) (-\$3.3M), coupled with increased insulator staff and overtime to recover schedule, 209E Project (-\$0.3M) and higher MSA (-\$1.2M) costs for Fleet/Training, etc.

Waste Sites – The contract to date cost variance (+\$0.5M) is primarily related to efficiencies in the initial effort to develop the agreement in principle for the U Plant Zone (+\$0.3M) and efficiencies in project management and other Hanford Contractor support (+\$0.2M).

ARRA RL-0040.R1.2 Outer Zone D&D

The contract to date cost variance (+\$1.2M) is primarily related to efficiencies in mobilization gained by changing to direct haul to ERDF, which reduced costs and environmental impacts associated with construction of a container transfer area (+\$0.6M). Lower than modeled costs have been realized on the initial confirmatory sampling waste sites due to the non-complex nature of the waste sites addressed to date (+\$0.8M). However, these efficiencies are being offset by higher than planned remediation costs at BC Control Area due to the greater depth of contamination and the larger volume of soil being removed to ERDF (-\$0.2M).

In addition, the ALE Project continues to underrun due to efficiencies and less asbestos abatement activities required than planned (+\$4.0M). This is also offset by overruns in the 212-N/P/R Project (-\$1.2M) and the acceleration of the 212 Railcars scope from FY 2011 to FY 2010 (-\$0.3M).

Base**CTD Schedule Performance: (-\$0.3M/-0.7%)**

The negative schedule variance is due to delay in starting construction of the Central Landfill and the NRDWL barriers pending agreement on the closure plans.

CTD Cost Performance: (+\$6.0M/+14.6%)

The 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) (+\$1.2M) less than expected, completed the sampling of Cell 30 with less resources than planned (+\$0.9M), Program Management utilizing less resources (+\$0.9M), capital equipment (+\$0.4M), Usage Base Services (+\$0.1M) and underrun in G&A and direct distributable allocations (+\$1.2M).

The favorable cost variance for Waste Sites (+\$0.8M) is due to less extensive regulatory support labor required for the U Zone agreement in principal and an inadvertent overstatement of performance related to the 600 Central Landfill barrier in March 2010.

Contract Performance Report Formats are provided in Appendix A and Appendix A-1.

Funds vs. Spend Forecast (\$M)

WBS 040/RL-0040 Nuclear Facility D&D	FY 2010		
	Projected Funding	Spending Forecast	Variance
ARRA	138.3	121.2	17.1
Base	<u>25.5</u>	<u>15.4</u>	<u>10.0</u>
Total	163.8	136.6	27.1

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Projected Funding includes FY 2009 uncosted and FY 2010 expected new budget authority.

Critical Path Schedule

Critical path analysis can be provided upon request.

Estimate at Completion (EAC)

The BAC and EAC now include FY 2009 through FY 2018, the PRC contract period.

Baseline Change Requests

BCR-PRC-10-025R0, U-Plant Cell 30 Disposition.

BCR-R40-10-005R0, Scientific Consultant from DOE-NTS Regarding BC Controlled Area.

BCR-R40-10-007R0, Recovery Plan for 600 Area Old Central Landfill Remediation.

MILESTONE STATUS

None currently identified.

SELF-PERFORMED WORK

The Section H. clause entitled, Self-Performed Work, is addressed in the Monthly Report Overview.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.