

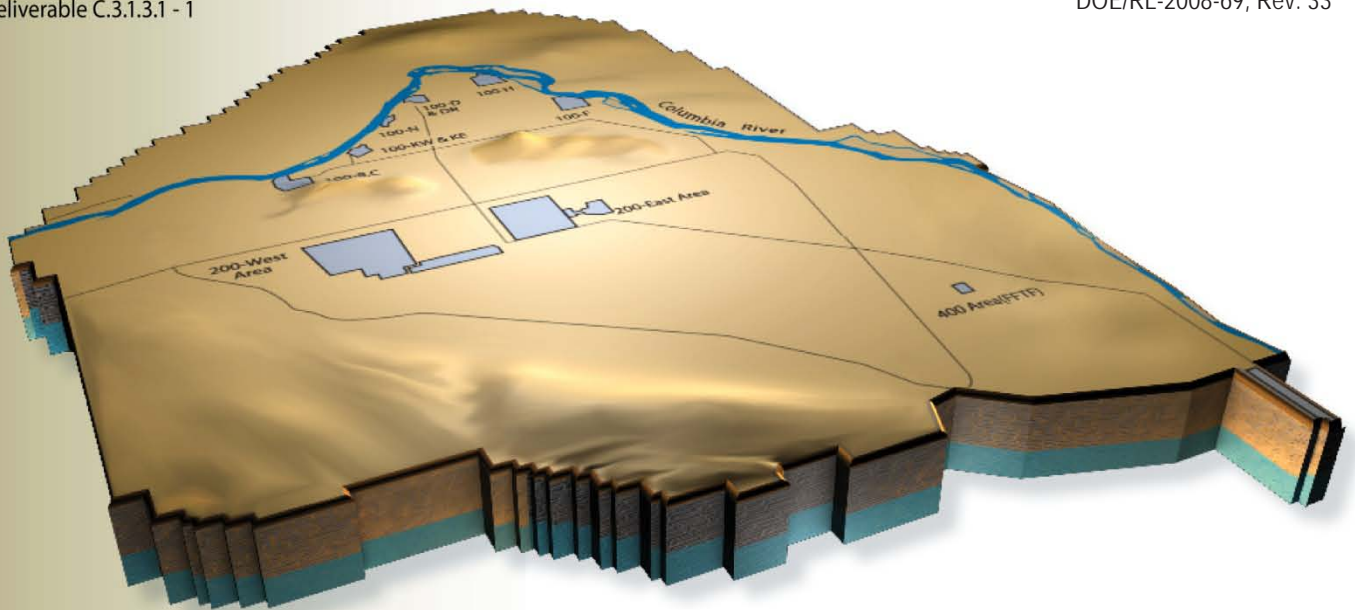


J. G. Lehew
President and Chief
Executive Officer

Monthly Performance Report

U.S. Department of Energy Contract,
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November 2009
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CONTENTS

EXECUTIVE SUMMARY.....	2
TARGET ZERO PERFORMANCE.....	3
PROGRAM SUMMARIES.....	4
PROJECT SUMMARIES.....	11
KEY ACCOMPLISHMENTS.....	16
MAJOR ISSUES.....	29
EARNED VALUE MANAGEMENT.....	33
FUNDING ANALYSIS.....	45
BASELINE CHANGE REQUESTS.....	46
SELF-PERFORMED WORK.....	47
GOVERNMENT FURNISHED SERVICES AND INFORMATION.....	47

PROJECT BASELINE SUMMARY SECTIONS

Section A – Nuclear Materials Stabilization and Disposition of PFP (RL-0011).....	A
Section B – Spent Nuclear Fuel Stabilization and Disposition (RL-0012).....	B
Section C – Solid Waste Stabilization and Disposition (RL-0013).....	C
Section D – Soil and Groundwater Remediation Project (RL-0030).....	D
Section E – Nuclear Facility D&D, Remainder of Hanford (RL-0040).....	E
Section F – Nuclear Facility D&D, River Corridor (RL-0041).....	F
Section G – FFTF Closure (RL-0042).....	G

APPENDICES

Appendix A – Contract Performance Reports
Appendix A-1 – Contract Performance Reports - ARRA
Appendix B – Contract Deliverables, Milestones, Metrics
Appendix C – Project Services and Support (WBS 000) (PBS RL-XX.99)

EXECUTIVE SUMMARY

Focus on Safety

As of October 28, 2009, the CHPRC Team completed 1,026,676 hours without a lost work day. This significant accomplishment was announced and celebrated at the November President's Zero Accident Council (PZAC), which was hosted by the Safety, Health, Security and Quality organization. The PZAC also highlighted Winter Safety and Heart Health.

The pilot activity launched at Waste & Fuels Management Project for the Workers Observing Workers (WOW) safety observation program continued in November. Employee Zero Accident Council (EZAC) representatives continued to meet weekly to address program improvements and employee feedback in order to ensure the program is effective. A formal training course was developed (Course #600020) for future observers, and 50 employees have received "train the trainer" qualification. Training material has been distributed to all projects. Lockheed Martin is working on development of a user-friendly safety observation database for Project use to document and collect observation results for trending purposes.

CHPRC has been aggressively pursuing implementation of Integrated Safety Management System (ISMS)/Environmental Management System (EMS) Phase II. Multiple assessments have been performed to review current practices and evaluate the maturity of program implementation. In view of the safety performance expectations of the project, CHPRC developed and submitted to RL a Continuing Safety Improvement Action Plan using the lessons learned from the recent Washington Closure Hanford, LLC Fall Event; data from the Occurrence Reporting System and the Condition Reporting and Resolution System (CRRS) and the Safety Analysis Center. Based on further review and comments from RL, CHPRC is developing additional detail to address the following areas of the plan:

- Conduct of Operations and Work Control
- Elevated Work
- Hazardous Energy Control
- Hoisting & Rigging/Documented Safety Analysis Compliance
- Radiological Work Practices and Technical Basis Documents
- Additional Safety Improvement Actions

CHPRC continues to monitor these activities and will submit the additional detail of the plan in December.

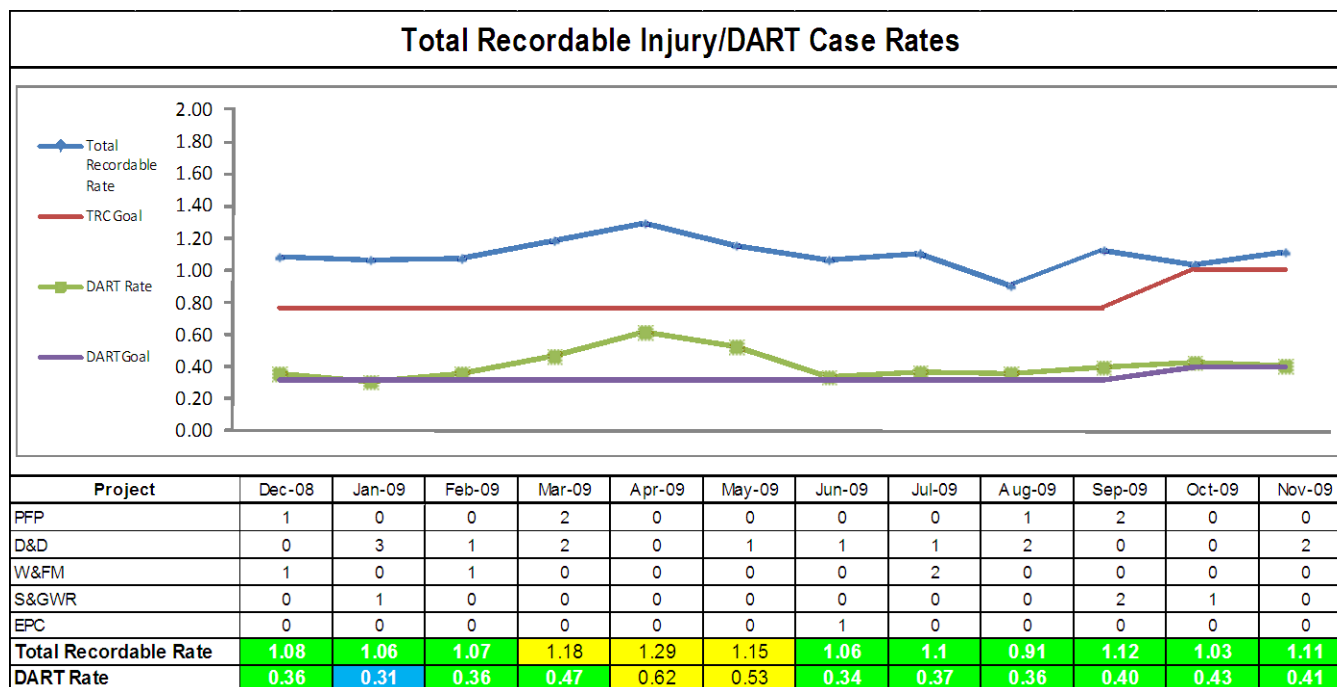


Chris Hoffman, an Epidemiologist from Advanced Med Hanford, presented information on Heart Health at the November PZAC.

TARGET ZERO PERFORMANCE

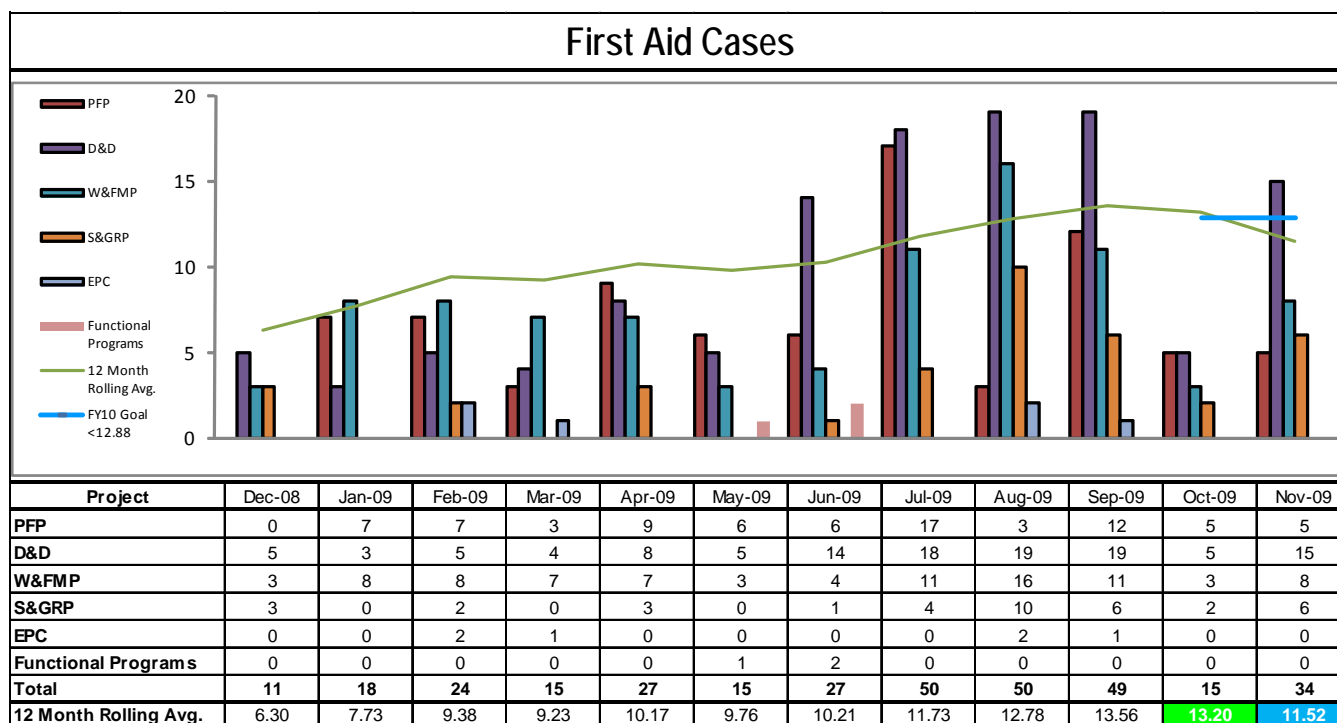
November 2009

CHPRC continued focusing on integrating safety programs in all work planning and business systems and on promoting “Thinking Target Zero.”



Days Away, Restricted or Transferred (DART) Workdays Case Rate – CHPRC operated over 534,000 hours during the month of November with no reported DART cases.

Total Recordable Injury Case Rate – Two recordable injuries were reported during the month of November. In the first injury, an employee incurred a head laceration when a tool being used to drive a T-post into the ground slipped and struck the employee’s head. The resultant injury required medical treatment beyond first aid (gluing of the wound). In the second injury, an employee was exiting a building when the door struck the employee’s right foot causing an injury to the big toe. The employee’s injured digit was examined, bandaged and an antibiotic was prescribed.



First Aid Case Summary – Thirty four first aid cases were reported in November.

Contusion/abrasion/laceration type injuries were experienced at a higher rate than the norm, accounting for one-half of the total number. These events were caused most often by such acts as striking against fixed objects and exposure to general material handling activity. Sprain and strain type injuries were slightly down for the month.

PROGRAM SUMMARIES

Safety, Health, Security, and Quality

Occupational Safety and Industrial Hygiene (OS&IH) Programs completed review of the results stemming from CH2M Hill Corporate ISMS/EMS Phase II review. The review produced some OS&IH-related program items that will need upgrading prior to the CHPRC’s declaration of readiness. The items have been loaded into the Condition Reporting and Resolution System (CRRS) for near term action.

The monthly Presidents Zero Accident Council (PZAC) meeting was held on November 18th. The Safety, Health, Security, and Quality (SHS&Q) organization sponsored the meeting. Notable presentations delivered during the a session included a focus on *Heart Health Month*, a safety video on potential fire hazards with use of space heaters, Hanford winter driving statistics, selection of environmentally-friendly winter de-icer products, and a general roll-out of the CHPRC’s Winter Safety Campaign.

Other significant OS&IH Program activities included:

- Development and issuance of the following six *Thinking Target Zero* and special safety bulletins; Chemical Safety, Cellular Phone Usage in Vehicles, Hand Injury Protection, Use and Maintenance of Office Chairs, Government Motor Vehicle Operation (attending to running vehicles), and Portable Vehicle-Mounted Generators and Light Plants.

- Commencement of a review to establish an interface between the posting of safety information in existing *safety logbooks*, and identification of potential issues using the CRRS.
- Provided DOE/HQ Voluntary protection Program (VPP) support for formal assessment at the Idaho National Laboratory; also conducted a VPP outreach mentoring visit in Prosser, WA.
- In preparation for formal onsite review for CHPRC VPP recognition in 2010, assisted in development of a VPP Smart Book of information.
- Participation by SH&SQ staff in a Vehicle Safety Awareness class sponsored by a professional driver instructor. Plans include a roll-out to other CHPRC Projects on Site.
- Continuation of formalized assistance visits to the CHPRC Projects.
- Provision of Central Programs oversight of beryllium characterization assessment activities; publication of revisions to PRC-PRO-SH-6155, *Implementation of the Hanford Site Chronic Beryllium Disease Prevention Program*, planning for employee completion of Beryllium Assigned Worker “gap” training, beryllium work permit development and integration into work planning, and determination of a building signage process.
- Completed revision of a special Employee Job Task Analysis (EJTA) process which includes an electronic version of the EJTA form for construction subcontractor use outside the Hanford Intranet firewall.
- Continued to represent CHPRC with participation on four Hanford Site-wide program development teams (Beryllium, Respiratory Protection, Excavation Safety, and Fall Protection).
- Coordinated CHPRC efforts to inspect and identify Safway scaffold tube components for possible design/quality issue relating to tube wall thickness (limited to specific batches of material). Awaiting further direction from Safway on their engineering follow up, and disposition of parts located in CHPRC inventory.
- Based on input from the Waste & Fuels Management Project pilot of the CHPRC’s peer safety observation program (*Workers Observing Workers*, or WOW), the employee training program was finalized and issued to each Project for use. Volunteer worker trainers who have been qualified will be presenting within their projects. Chartered working group meetings continue.
- Scaffold procedure improvement initiatives continue, in a joint effort among four participating Hanford prime contractors.
- Assisted Project OS&IH professionals in review of several draft contract *Statement of Work* document content to ensure uniformity and comprehensiveness of approach.
- Completed a review of OSHA requirements (29 CFR 1910 & 1926) to determine specific requirements within the various Subparts for assignment of *Competent Person* responsibilities.
- Developed a site-wide CHPRC inventory of Health and Safety Plans (HASPs), in support of site-wide development of guidance information (content).
- Developed a task description and task order for Mission Support Alliance data entry of industrial hygiene monitoring and sampling data.
- Offers were made and accepted by two candidates to fill Central programs Industrial Hygiene vacancies with mobilization planned for mid-December.
- Completed a review of Bloodborne Pathogen training to determine sufficiency of the format for delivering computer-based refresher training.

Work Control Key activities included:

- Initiated the Release Authority designation process and worked with training and project organizations to support full implementation.
- Provided support for the development of a site excavation procedure.

- Provided mentoring throughout the projects including integration of work control with various SMEs as well as several meetings with SGRP and EPC regarding improvement efforts with work documentation and appropriate release of work with focus on addressing related project interface challenges. Mentoring was also provided to Retrieval Operations personnel regarding consistent and effective format of work instructions including focus on prerequisite requirements.
- Continued efforts to improve AJHA program based on user feedback with focus on the effective format of Personal Protective Equipment (PPE) selection criteria.
- Continued efforts with project engineering personnel to improve preventive maintenance program with ongoing process to update data sheets with applicable tolerance requirements.
- Supported Conduct of Operations mentoring including field observations throughout the projects as well as a Conduct of Operations Forum meeting with project personnel.
- Completed Work Site Assessments focusing on results of PRC-MD-WKM-40214 implementation as well as a Conduct of Operations evaluation regarding recent issues at Retrieval Operations.
- Supported various training including management overview course for supervisors, AJHA process training, Buyer's Technical Representative (BTR) refresher training as well as the Safety Leadership training.

CHPRC submitted several Nuclear safety items to RL for review and approval, including:

- *Updated Sludge Treatment Project Safety Design Strategy*
- *105 KE Soil DBGD SPA Checklist for 3 previously filled ERDF Cans with one liner*
- *Waste Encapsulation and Storage Facility Authorization Agreement Annual Update*
- *Canister Storage Building and 200 Area Interim Storage Area Authorization Agreement Annual Update*
- *Solid Waste Operations Complex Master Documented Safety Analysis and the Technical Safety Requirements Criteria Document - 2009 Annual Update*
- *Proposed Plutonium Finishing Plant Safety Basis Changes for Transition of the 2736-Z Complex into Deactivation and Decommissioning*
- *Strength Based Justification for the Continued Use of High-Efficiency Particulate Air Filters at T Plant and the Waste Receiving and Processing Facility*
- *Settler Sludge Sample Fuel SPA Checklist*
- *Sludge Treatment Project Modification Determination for T Plant, CHPRC-STP-00109*

CHPRC received RL approval of:

- *RL Surveillance of CHPRC Application of Code of Records (S-09-PRC-027)*
- *105 KE Soil DBGD SPA Checklist for 3 previously filled ERDF Cans with one liner*
- *Next Generation Retrieval, Phase II Major Modification Determination*
- *Completion of Contract Deliverable C.3.2-4, "Authorization Agreements (AA)," for B Plant and the Plutonium-Uranium Extraction (PUREX) Facility*
- *1706 Product Tank CE SPA Checklist*
- *Plutonium Finishing Plant (PFP) Safety Basis Changes Submitted to Close High-Efficiency Particle Air Filter Age Degradation Justification for Continued Operations and Associated Unreviewed Safety Question (USQ)*

Environmental Program and Regulatory Management (EPRM)

The independent audit to validate full implementation of the EMS was completed in conjunction with the Phase II corporate review of the ISMS/EMS. The audit out brief was held on November 6, 2009. There were two minor non-conformances, 17 observations, and 18 noteworthy practices. A corrective

action plan was developed and vetted with senior management and RL. As a result, a letter was delivered to RL declaring conformance with the CRD O 450.1A requirements for an EMS. Corrective actions to resolve the findings of the audit are underway in preparation for the Phase II ISMS/EMS audit by RL.

The annual pollution prevention report was submitted electronically into the Pollution Prevention Tracking and Reporting System on November 30, 2009. After several years of providing input to a site-wide pollution report to DOE-HQ, site contractors were asked to provide contractor-specific information for FY 2009. Each contractor was given access to the national database and was asked to enter their data. This resulted in a significant challenge because some of the information is collected on a “site basis” and had to be divided among contractors. Systems for routine or automatic collection of other information were not in place. Despite the challenges, the required information was compiled, entered into the system and transmitted to DOE-HQ.

The comment period for EPA Region 10’s public notice of its proposal to remove the CERCLA wastewater discharge prohibition from the NPDES permit (WA-002591-7) that was issued last summer, closed on November 16, 2009. This was in response to the CHRPC permit appeal filed last summer. Additionally at CHRPC’s request, the public notice also stated that EPA was removing all provisions from the permit pertaining to discharge from 300 Area TEDF due to the shutdown of that facility (no comment on this was requested). EPA reported that other than CHRPC’s comment in support of the modification, no comments were received. It is expected that the modified permit will be issued mid-December.

A quality assurance project plan addressing NESHAP requirements for the monitoring of radioactive air emissions was finalized on November 11, 2009, and included in CHRPC-00189, CHRPC Environmental Quality Assurance Program Plan.

Agreement was reached with Ecology on the approach for completion of the RCRA closure plan for Modutank #1. This includes Ecology agreement that they will be able to approve the plan prior to issuance of the renewed Hanford Facility RCRA Permit (anticipated issuance no earlier than late 2010), and are agreeable to granting approval to extend the closure period beyond 180 days. Current plans are to begin closure spring 2010.

The EQA organization completed six surveillances during the month of November:

- QA-EQA-SURV-10-005/IEP 7782 - 100K & STP: Determine compliance with CHRPC-00189 Section 2.0, Quality Systems Components. No issues resulted from this activity.
- QA-EQA-SURV-10-007/IEP 7784 - Review S&GRP GRP-FS-04-G-028 Field Characterization and Treatment Monitoring Activities Groundwater Sampling for compliance to HASQARD Volume 2 Rev. 3. No issues resulted from this activity.
- QA-EQA-SURV-10-038/IEP 8474 - Review S&GRP Field Cleaning Process for Compliance with HASQARD. No issues resulted from this activity.
- QA-EQA-SURV-10-039/IEP 8513 - Review GRP-EE-01-7.4 and GRP-FS-04-G-005 for compliance with PRC-PRO-MN-490. One finding dealing with the need to update procedures and one opportunity for improvement regarding the need to add flow charts to administrative procedures resulted from this activity.
- QA-EQA-SUV-10-040/ IEP 8514 - Review S&GRP Field Characterization and Treatment Monitoring Activities for MSDS. One opportunity for improvement to better clarify the term “readily available” in the MSDS process resulted from this activity.

- QA-EQA-SURV-10-041/8515 - DR&QA: Review implementation of PRC-PRO-EP-40205 Environmental Calculations. The first finding was the need to update PRC-PRO-EP-40205 to improve the calculation process and the second finding was similar in that Environmental calculations did not comply with PRC-PRO-EP-40205. Additionally, the need to add a link to the Hanford Document Numbering System and to add a flow chart to the procedure was identified as opportunities for improvement.

The Strategic Planning team completed the review, characterization and consolidation of the Alpha Caissons Inventory Records. The Risk Profile has been updated in preparation for issuing PMB Revision 2 Risk Analysis.

The ARRA Information Exchange Working Group held its first complex-wide conference call to discuss the eight recommendations and assign leads and team member to those actions which are still open.

Engineering Procurement and Construction (EPC)

ARRA

The ARRA Trailer Placement Project installed 10 Mobile Facilities and Seven Mobile Facilities were occupied during November 2009. The majority of the work on ARRA Trailer site preparation was for the EPC/S&GW Complex, sidewalk systems, parking lot and lighting were construction at mobile facility site during the month of November 2009.

Central Engineering prepared a Lessons Learned document to clarify NEC requirements for temporary power installations originating from generator power sources. The Lessons Learned has been forwarded to CHPRC Issues Management for review and release.

Central Engineering issued for review Management Directive PRC-MD-EN-40250, Revision 0-0, *Engineering Design and Evaluation (Natural Phenomena Hazard)* to implement DOE-STD-1020-2002, *Natural Phenomena Hazards Design and Evaluation Criteria for Department of Energy Facilities*, and the current International Building Code (IBC) edition (2006), for new facilities and major modification of existing facilities. Publication is pending completion of USQ reviews of the MD.

The new CHPRC Welding Manual was issued to all Site contractors for use. The manual has been updated to reflect interface agreements between contractors and to address rules for construction welding that were formerly performed by the FFS program.

Business Services and Project Controls

The primary focus in November 2009 was on resolution of RL comments on the PRC Baseline, Rev. 1, and preparation of the Performance Measurement Baseline (PMB), Rev. 2. Consistent with RL guidance and as documented in CHPRC letter CHPRC-0902284A R1, "Contract Number DE-AC06-08RL14788 – Request for Revised Deliverable Dates," dated November 20, 2009, CHPRC is incorporating changes to the PMB for December 2009 using an Advanced Work Authorization (AWA). CHPRC also plans to submit, by January 31, 2010, a revised baseline to RL addressing the PRC Baseline, Rev. 1, review comments previously provided to CHPRC, and other subsequent DOE directed changes. The January submittal will also include risk analysis for each project consistent with the revised baseline, justifying the assigned management reserve for the ten-year period, to at least a 50 percent confidence level.

Work continued in the area of Requests for Equitable Adjustment (REA) process. A process for estimating and reviewing certified cost proposals per Federal Acquisition Regulations was assembled, with modification of process, and an action plan due to RL December 31, 2009. Additional estimating

resources have been identified / are being solicited for participation on an REA Team that will assist the Projects in their estimate preparation and submittals.

ARRA reporting continued with submittal of weekly Jobs Data Call updates and the Monthly Report to RL and submittal of the initial ARRA Quarterly Report to the FederalReporting.gov web site.

In November 2009, CHPRC approved and implemented three (3) baseline changes requests. All three of the change requests are administrative in nature and did not change scope, budget, management reserve or fee. The Format 3 Reports in Appendices A and A-1 include a listing of these specific change requests.

Procurement implemented the *FAR 52.222-54* Employment Eligibility Verification (January 2009). Contract Specialists have directed compliance with the clause in existing long-term, blanket and pre-select contracts. The FAR reference has also been added to our General provisions which were published and are being included in new contracts. There have only been a few contractors reluctant to accept the provision and no significant exceptions or contractor back-charges. Implementation costs in procurement have thus far been administrative.

The annual Balanced Scorecard Report (BSC), a Prime Contract deliverable, was submitted on November 12, 2009, and RL reviewed and approved on the same day. This reports on the performance of the CHPRC procurement organization against an RL approved BSC Plan.

Facilities and Property Management deployed the ARRA Facilities Compliance Verification Team on November 2, 2009. As of November 30, the task team completed post-occupancy verification of 43 ARRA non-restroom/shower facilities (58%) to ensure compliance to all applicable fire protection, safety, security, emergency preparedness, cold weather protection and preventive maintenance requirements. Eighty percent of the issues discovered have been corrected and all open items are being tracked to completion.

As of November 30, 29 Restroom/Shower Trailers and 74 Mobile Offices and Craft Trailers (103 total) have been accepted for occupancy.

RL accepted the results of the 100% Physical Inventory of CHPRC property and approved the CHPRC Personal Property Management System on November 30, 2009.

During November, Prime Contracts received and processed seven contract modifications (060, 078, 079, 080, 081, 082, and 083) from RL. The Correspondence Review Team reviewed and determined distribution for 44 incoming letters from RL and the Prime Contract Manager reviewed 51 outgoing correspondence packages.

Material Services provided a report on P-Card purchases to the Environmental Program and Regulatory Management organization in support of their annual P2/Environmentally Preferable Procurement report to DOE. Nearly 1,850 purchases were captured with items ranging from recycled paper and toner cartridges to light bulbs.

During the November reporting period, Interface Management:

- Drafted a Business Case to clarify the intent of responsibilities regarding the J.3 matrix for Fleet Services. At month end, the dialogue of a mutual agreement objective continued.
- Initiated development of a new Administrative Interface Agreement (AIA) with the MSA for Fleet Services support to CHPRC. This proposed agreement is intended to clarify CHPRC and MSA roles and responsibilities for acquisition of vehicles and equipment required by the CHPRC to meet our PRC objectives.

- Completed negotiation of a new AIA with the MSA for CHPRC Waste & Fuels Management Project's use of four Super Dump trucks by CHPRC construction personnel performing waste site remediation. This agreement addresses CHPRC's operation of the Super Dumps and their interface with the MSA Motor Carrier Services Program and Fleet Services. Late in the month, Interface Management initiated development of a revision to this AIA incorporating CHPRC Waste & Fuels Management Project's planned addition of six additional Super Dumps to be used on waste site remediation.
- Completed development and negotiation of a new AIA for Water Services between CHPRC and the MSA. Once approved, this document, which addresses water use by multiple CHPRC managed facilities, will enable elimination of a number of interface agreements preceding the CHPRC and the MSA and will significantly simplify water systems interfaces.
- Evaluated CHPRC Critical Lift Plans in response to issues associated with MSA Crane & Rigging support of CHPRC and provided recommendations for improvement to the CHPRC Critical Lift Plan process.
- Continued to work with AMH and CHPRC SH&Q and Procurement to address issues associated with implementation of 10 CFR 851, Worker Safety & Health Program, for CHPRC Subcontractor employees and completion of associated action items from the CHPRC September 23, 2009, Quarterly Subcontractor Safety Meeting.
- In conjunction with WRPS, supported the MSA kick-off of development of enhanced MSA Service Delivery Documents (SDDs) for sixty-three services provided by the MSA. Enhanced SDDs, when completed, are intended to better communicate to Project end-users the definition and cost of MSA provided services and how to obtain them.
- Developed and provided MSA long-range CHPRC staffing forecast in support of MSA efforts to develop the Infrastructure and Services Alignment Plan (ISAP).
- Facilitated development and approval of agreement with WRPS for CHPRC Waste & Fuels Management Project to borrow large government-owned waste containers for use in offsite waste shipments for processing.

Communications and Outreach

Communications supported DOE in an interview with the Tri-City Herald on preparing U Plant for demolition. U Plant is a Recovery Act project that includes demolishing large chemical tanks and ancillary facilities next to the canyon building, removing waste for disposition, and moving contaminated equipment on the canyon deck into lower levels of the plant into the cells before placing an engineered barrier over the remnants of the canyon building. Demolition is expected to begin in 2012, therefore, further media coverage will continue as we progress toward that time.

Coverage of CHPRC's Recovery Act projects included a visit from Harry Esteve, a reporter from The Oregonian. Mr. Esteve focused on groundwater treatment at 100-DX, demolition at the 200 North facilities, and soil remediation at the BC Control Areas.

Senator Patty Murray held a press conference on November 23, 2009, at HAMMER to discuss Recovery Act funding and the jobs it has created in Washington State, particularly at Hanford. John Lehew and First Line Supervisor Ty Rose spoke on behalf of CHPRC.

Communications published regular newsletters, including *On the Plateau*, showcasing monthly employee, project and safety accomplishments and the weekly *CHPRC Recovery Act Update* capturing CHPRC's stimulus funded accomplishments including articles on new hires and remediation efforts.

Communications continued to support and assist committees through graphics of posters, flyers, e-mails and the ISMS/EMS programs of "Target ZERO," "WOW," "VPP" Poster campaign, ISMS/EMS/VPP Activity book and Green Gazette.

Community Outreach efforts continued with completing the Holiday Giving campaign for the Richland School District to fill 75 gift bags for school-aged children with special needs and with launching the Junior Achievement Bowling Fundraiser.

Communications supported the CHPRC Central Plateau Cleanup Strategy team in preparing for several stakeholder interactions, including presentations at the Hanford Advisory Board River and Plateau Committee meetings and Tri-Cities Communities.

PROJECT SUMMARIES

RL-0011 Nuclear Materials Stabilization and Disposition

The PFP project continues to maintain PFP facilities compliant with authorization agreement requirements.

American Recovery and Reinvestment Act (ARRA)

Field qualification is continuing for the many new staff hired or subcontracted to support an expansion in the number of D&D field work teams. New team members are being rotated through the existing seven teams to gain hands-on experience and complete their on-the-job training and qualification.

Ventilation ducting has been removed and containerized for disposal, completing removals from Rooms 134 and 154. NDA measurements were completed confirming the eight ventilated sample cabinets removed from vault 174 of the 234-5Z building as Low Level Waste (LLW). Forty-nine glove boxes and laboratory hoods have now been cleaned out, decontaminated to low level waste standards and removed from PFP facilities since October 1, 2008, 26 of which were under ARRA. Crews completed final decontamination actions in glove boxes HA-20MB and HA21I. Crews also continued decontamination of process glove boxes HC-230C-3 and HC-230C-5, and continued equipment removal from HC-60. Preparations were completed for removal of four glove boxes in Room 146 of PFP's former Analytical Laboratory.

Cold and dark isolation was verified for PFP ancillary building 2734-ZJ, nitrogen storage tank/pad, in preparation for removal of the vendor-owned tank in December, subject to plant priorities and weather. Decommissioning of the nitrogen generator facility near the 2731-ZA building and preparations for cold and dark isolation were also initiated with draining of the coolant from this structure.

Insulators continued removal of asbestos insulation from piping in the 234-5Z building, bringing the total removed under Recovery Act funding to more than 6,600 feet.

Base

De-inventory of Special Nuclear Material (SNM) is complete. All 3013/9975 containers and all Hanford Un-Irradiated Fuel Packages have been shipped from PFP, and the last of the 19 excess sources and standards to be dispositioned by September 30, 2009, have been shipped to the Central Waste Complex (CWC). De-inventory of slightly irradiated fuel was completed ahead of schedule.

Elimination of the Protected Area was completed ahead of schedule.

Terminal cleanout operations are continuing in the 2736-Z/ZB Vault complex.

D&D teams continue removing process equipment from the Plutonium Reclamation Facility (PRF) (236-Z Building) gallery glove boxes, and have completed process equipment removal from the first floor west glove box. Process equipment removal from the second floor west gallery glove box is 80%

complete. PRF canyon work focused on replacing the old cable reel and cable with a new reel, this included work package modifications, shop work and actual canyon entry activities. The PRF engineering team has reviewed the new concept of using a Brokk to size reduce the pencil tanks. This approach will now be laid in to the work schedule. It has been determined that not one tool alone will effectively size reduce the pencil tanks but a combination of shears and saws. Tank characterization has started for the RADTU tank located in the South Canyon Airlock.

Detailed planning was initiated for D&D work scope in the 242-Z facility.

RL-0012 Spent Nuclear Fuel Stabilization and Disposition

Sludge Treatment Project (STP) received the Technology Readiness Assessment (TRA) report on the Engineered Container Sludge Disposition sub-project, which included the acknowledgement that the STP Critical Technology Elements (CTEs) which were reviewed, and evaluated to be at a Technology Readiness Level 4 (TRL - 4). This is one level higher than the CHPRC self evaluation.

STP has submitted to RL the Safety Design Strategy (SDS) document for approval of the Engineered Container Sludge Disposition sub-project. This document is required by DOE Order 1189 (Safety in Design) and establishes the deliverables and methods for safety analysis in support of STP.

STP successfully completed the Construction Acceptance Test (CAT) activities associated with the Settler Tank Retrieval systems. Following readiness reviews and approvals, the project will start the retrieval of sludge from the ten settler tanks and deposit the sludge in Engineered Container (EC) SCS-230 for eventual sampling.

STP completed the technical evaluation on the four proposals for the Phase II Support Contract. A recommendation of award was sent to CHPRC procurement for their action. In addition, five technology vendors responded to the Request for Information (RFI) for Phase II Technology Evaluation and Alternatives Selection. The proposals represent five different approaches to sludge oxidation and stabilization. STP plans to select up to five different technology approaches for further process demonstration with sludge simulants in the next phase of this process.

RL-0013 Waste and Fuels Management Project

The Waste and Fuels Management Project (WFMP) focused on delivering safe, compliant performance.

ARRA

Weekly and monthly Recovery Act Reporting continued. M/LLW shipped 51.1m³ and completed 24.3m³ of M-91-42 waste during the month. In addition, M/LLW completed 24.3m³ of M-91-43 waste. TRU Retrieval successfully installed temporary covers over 3A Trench 17 Boxes 80 and 27 and continued excavation of 3A Trench 17 Boxes 3 and 12. Next Generation Retrieval (NGR) awarded the contract for non-destructive assay (NDA) equipment and services to ANTECH Services. Site preparations for Trench 12B continued with the installation of the expanded asphalt pad. The Alpha Caisson Retrieval project issued Waste Processing System Preliminary Hazard Analysis report for review. Central Characterization Project (CCP) agreed on the roles and responsibilities between CCP and CHPRC with Hanford Atomic Metal Trades Council (HAMTC). TRU Repackaging continued training of Nuclear Chemical Operators (NCOs) and Radiological Control Technicians (RCTs), including mockup and on-the-job training (OJT). In addition, shift operations were initiated at T Plant in support of additional repackaging lines. The Waste Receiving and Processing Facility (WRAP) completed non-destructive examination (NDE) 238 drums and non-destructive assay (NDA) 237 drums. The mixed waste disposal trenches received six offsite shipments (19 containers) and shipped two on-site transfers (one Effluent Treatment Facility tanker). In addition, the mixed waste disposal trenches

completed surface sealing of top of Module 3; placed remaining three waste containers and commenced pouring concrete lifts into Module 10 waste encasement.

Base

The WFMP continued maintaining facilities in a safe and compliant condition. The Waste Encapsulation and Storage Facility (WESF) continued support to Energy Savings Performance Contract construction demolition and upgrade activities. The Central Waste Complex (CWC) shipped four off-site shipments (106 containers), shipped five on-site transfers (155 containers), and received 12 on-site transfers (305 containers). The 200 Area Treated Effluent Disposal Facility (TEDF) discharged 1.7M gallons.

RL-0030 Soil, Groundwater and Vadose Zone Remediation

ARRA

Recovery Act dollars are at work across the Central Plateau and along the Columbia River, constructing two groundwater treatment facilities and numerous wells that will be used for monitoring, extracting, and remediating groundwater near the Columbia River. Within the 100-HR-3 Operable Unit, the construction of the 11,500 square foot DX Groundwater Treatment Facility continued with the erection of the structural steel for the main process building shell. This phase of the facility construction is 60% complete. In addition to the main process building, two groundwater transfer buildings are being constructed to support the 600 gallons per minute facility. The foundation and slab of each transfer building was completed and the erection of the first transfer building is 15% complete. Overall, the construction of the facility is ahead of schedule. Recovery Act funding has allowed CHPRC to prioritize the DX project and accelerate its construction, whereas it might not have started until much later under base funding. The DX pump-and-treat system is being designed to help protect the Columbia River by cleaning up chromium-contaminated groundwater in the 100 Area.

Additionally, Recovery Act funding is being used across the Hanford Site to prepare for and complete the drilling of numerous wells that will be used for monitoring, extracting, and remediating groundwater. Recent progress includes:

- 100-NR-2: Drilling on the 171 wells for the expansion of the strontium-90 apatite barrier continued with 34 wells in process. The 34 wells have been drilled to total depth and eleven of the 34 have been constructed and developed. As a result of low Columbia River water elevations, the development of the remaining wells is progressing slower than expected. Therefore, the development of the wells will continue to be dependent on the water elevations.
- 100-HR-3 H Area: Overall, 25 wells are being installed in support of the new DX Groundwater Treatment Facility. The first twelve wells have been drilled, constructed, and developed. The remaining 13 well locations were approved by the State Historic Preservation Officer enabling the planning and field work to continue.
- 100-HR-3 D Area: Overall, 14 wells are being installed in support of the Remedial Process Optimization effort to increase the productivity of the treatment facilities. Six wells are in process with all six being drilled to total depth and constructed. Four of the six wells have been developed. The remaining eight of the 14 well locations were approved by the State Historic Preservation Officer enabling the planning and field work to continue.
- 100-BC-5: Drilling continued on two wells of the four wells. One of the wells was drilled to total depth and constructed.
- 200-ZP-1 Expansion: Overall, 20 wells are being installed in support of the new 200 West Groundwater Treatment Facility, with 17 of the 20 wells being installed with ARRA funding (three

were installed in FY 2009 with base funding). Currently, five of the six wells have been drilled to total depth and constructed with two of these wells being developed. The documentation necessary to install the remaining eleven wells continued.

- 200-BP-5: The drilling of two of the three wells was initiated in November.

Base

Approval to proceed with road and pad installation and drilling of the final two wells required to support Phase 2 realignment of the KX and KR4 pump-and-treat systems was received, and construction of roads/pads was initiated. Both the 100-KR-4 Remedial Process Optimization technical memorandum and the 100-KR-4 Interim Action Monitoring Plan Supplement were provided to RL for review. Proposed locations for wells required for K Decision Unit remedial investigation and for Phase 3 realignment of the 100-KR-4 pump-and-treat systems were walked down with representatives of the Tribal Nations in preparation for upcoming drilling activities.

EPC Projects in Support of S&GRP

ARRA

Concerns with pipe and well locations in the 200 West Area near the burial grounds is an issue. An USQD is being prepared by Waste and Fuels. A white paper discussing Tc-99 inventory and impact to the ERDF life span is being prepared. Five road crossings have been completed and grubbing for transfer piping has been started. Bids are to be received December 11, 2009, for construction of the extraction and injection buildings. The RFP Process Facility site civil and construction will be released the week of December 7, 2009.

Work continued on preparation of the 200W Area Pump and Treat Project 90% designs for the Process Facility and Balance of Plant. Additional design work is required to incorporate changes in the equipment sizing and the lime addition system. Balance of Plant mobilization is in progress and includes procurement of materials, well rack fabrication and start of field work on road crossings.

Base

Modutank 3 construction is 98% complete. Design changes are required to modify the truck unloading dock. Modutank 3 construction will be complete early December 2009. Loading dock modifications will be complete late December 2009.

Continued construction of electrical and mechanical modifications on the KX and KR4 Phase II pump and treat expansion. Antennas were placed at extraction wells 199-K-178, 199-K-171, and 199-K-153 and the KX Process Building. These antennas are part of a wireless communication system to transmit process operation parameters from the well heads to the KX Process Building.

- In November, 154 well locations were sampled with a total of 599 samples being collected.
- 541 aquifer tube samples were collected from 182 tubes at 103 sites.

RL-0040 Nuclear Facility D&D, Remainder of Hanford

ARRA

Installation of additional trailers continues to support the expanded staff. Staffing ramp up for ARRA-funded scope is almost complete.

Demolition of the U Plant Ancillary facilities continued with asbestos abatement and demolition preparation ongoing in 224U and 224UA.

Demolition of 212R and 212P was completed as well as the radiological surveys. Sampling of the soil beneath the structures is scheduled for December.

Mobilization of trailers and equipment is continuing in preparation for the Arid Land Ecology (ALE) Reserve D&D. Asbestos abatement and demolition preparation activities have begun.

Completed Cold and Dark utility isolations to support future demolition for the lower ALE facilities and continued with the utility isolation activities for the upper ALE structures.

The first of two cells for U Canyon demolition were loaded with designated equipment and cover blocks put back in place.

Continued Cold and Dark utility isolations to support future demolition for the ALE facilities.

Commenced excavation of the first CW-3 Remove, Treat, and Dispose (RTD) waste site.

Base

Planned surveillance and maintenance (S&M) activities continue. Preparations are in progress to allow change out of the B Plant high-efficiency particulate air (HEPA) and pre-filters. While completing the annual maintenance on the B Plant exhaust fans, a bearing that needed to be replaced was discovered. The bearing has been replaced and the exhaust fan will be restarted after the B Plant filter change out is completed.

RL-0041 Nuclear Facility D&D, River Corridor

ARRA

Work continued in the 100K Area with completing demolition and loadout of Mobile Offices MO048 and MO969. Workers continued characterization of 115KE, 116KE, and 117KE; completed waste characterization at 183.1KW, 183.2KW, 183.3KW and 183.7KW; and continued final disposition characterization at 183.2KW, 183.3KW and 183.7KW. Cold and dark activities continued on 115KE, 116KE, and 117KE; and completed on 183.1KW, 183.2KW, 183.3KW and 183.7KW.

Continued asbestos abatement at 183.7KW.

Initiated asbestos set-up in the 1706KE/KER below-grade, then suspended work due to structural integrity concerns.

Continued waste site remediation of 100-K-56 and 100-K-42 Remove, Treat, and Dispose (RTD) sites.

Continued loading out the UPR-100-K-1 soil. Work was paused in the under-basin work and the work crew shifted to pipeline remediation for waste sites 100-K-47, 100-K-56, and 100-K-3.

The bauxite tank waste site outside the 183.1KW facility was demolished.

Ongoing work on the project includes removal of debris from the K West Basin as well as planning and design for 100K Area River Water Isolation, Electrical Power Isolation, and the K West Basin Airborne Contamination Remediation projects to support accelerated cleanup at the 100K Area.

Work continued on 105KE Reactor Disposition preliminary design, project definition and regulatory documentation. Initiated 105KE cold and dark activities. Initiated field work for characterization of the reactor core, process tube, and port surveying to begin early January and February for core boring activities.

Base

Workers at the 182K Water Reservoir Pump House began characterization, asbestos abatement, and continued cold and dark activities.

RL-0042 Fast Flux Test Facility (FFTF) Closure

The FFTF is being maintained in a low cost surveillance and maintenance (S&M) condition. The 400 Area water system continues to operate providing service to other occupants of the 400 Area and water for fire protection.

All scope within the Fast Flux Test Facility Closure (RL-0042) project is base funded. There is no funding from the ARRA.

KEY ACCOMPLISHMENTS

RL-0011 Nuclear Materials Stabilization and Disposition

11.02 Maintain Safe and Compliant PFP – Base

- Submitted changes (letter CHPRC-0900668) to the D&D Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) to facilitate transition of the 2736-Z Complex into the D&D mission. The submittal, based upon significantly lower remaining 2736-ZB plutonium inventory assumptions, reduces the number of safety systems within 2736-ZB that will remain subject to TSR Limiting Conditions for Operations. The submittal also includes changes to the criticality alarm system LCO to reflect CAP Z-7 operation in an alarm only function.
- Received approval from RL (letter 10-SED-0005) of DSA and TSR changes necessary to close out both the HEPA filter performance Justification for Continued Operations, and the Room 321 elevator hydraulic oil fire positive Unreviewed Safety Question. Both implementation plan and a management readiness assessment are being finalized to support implementation as required by PRC-PRO-NS-8317.
- To support deactivation of the Hanford Patrol Central Alarm Station at PFP, facility modifications to enable remote monitoring of the Criticality Alarm System (CAS) panels in the 321 power control room has continued for CAPs 7 and 9 Work completions is planned for early-December.
- Completed annual video inspection and leak testing of the 296-Z-7 stack probe in support of complying with the National Emissions Standards for Hazardous Air Pollutants, (NESHAP) requirements.
- Participated in the Environmental Management System (EMS) independent audit of CHPRC EMS conformance to the ISO 14001 Standard and the DOE requirements. Company-wide, only two minor non-conformances were identified which are required to be addressed.

11.04 Disposition SNM – Base

- The last Interim Storage Cask (ISC) was prepared and transferred to the 200 West Interim Storage Area (ISA).
- The EBR-II casks were prepared and transferred to the ISA.
- Disassembly of the Lampson crane for relocation to the 200W West ISA was initiated.
- The PFP protected area was eliminated.

11.05 Disposition PFP Facility – Base

- Process equipment removal from the PRF second floor west gallery glovebox is 80 percent complete. Integration of new teams to get field experience has slowed monthly progress but the concept of training new workers with experienced workers will help in the future for completing CHPRC milestones.

- Progress continued with the PRF canyon entries for reactivation of the canyon crane with only electrical work left. New cable reel has been assembled and is waiting for installation into the canyon. Preparations are under way to make room for the new reel. Additional scaffolding was added for the new platform along with higher hand rails for safety issues.
- PRF engineering has completed the review of using the Brokk as a means of size reducing the pencil tanks. This concept is the one that team will develop and integrate into the PRF schedule.
- The South Canyon Airlock (SCA) work has started on characterizing the RADTU tank. In preparation for removal of the tank, dimensions have been verified, no water in cooling jacket has been confirmed, and a video of the tank internals was taken to assist in characterization of the contents of the tank.
- New NCOs to support PRF are being integrated into the work teams as their required training is completed. This has worked well with senior NCO's providing hands-on field experience to the new NCOs.
- The completion of the work package for the entries into 242-Z is on hold pending input from Industrial Hygiene (IH). The planned air sampling of the tank room will provide IH the information needed to complete the input.
- The containment tent designs were approved and fabrication initiated. The scaffolding and tent are planned to be erected the end of November.
- Work on the waste disposal guidelines has been initiated. The glove box equipment will be disposed of in shielded drums. The drums will be loaded based on dose rates which is the most restrictive limit. A chart of the estimated dose rates to grams of americium with a 10 and 20 mil lining is being prepared.
- Engineering is assembling the drawings and initiating work on mechanical and electrical isolation to the 242-Z gloveboxes.

11.05 Disposition PFP Facility – ARRA

- Transferred the Room 146-1, 2, 3, 4 glove box unit to the PFP Solid Waste Organization (SWO) for disposal.
- Separated the Room 221E Hoods 221E-1, 2, 3 (three separate hoods) from their E4 systems, and transferred them to the SWO for disposal.
 - In Room 230C the process drain on glove box HC-60 was removed and approximately 90% of the mechanical isolations on glove box HC-230C-2 were completed.
 - The mechanical isolation for glove boxes HA-19B1 and HA-19B2 in Room 235B continued in November. Work in November included the removal of an external electrical furnace panel and process vacuum pump along with the associated process ventilation lines.
 - A new crew in Room 232 completed mobilization and replaced glove box HA-46 inlet filters and differential pressure gauges to prepare the glove box for internal equipment removal.
- The following Facility Modifications were completed in November:
 - The central PFP criticality alarm was relocated from the Patrol central alarm station to the PFP Power Operator's Control Room to support the elimination of the PFP protected area.
 - The replacement of the suspect counterfeit hardware installed on the 212-Z Lag Storage Area tents was completed eliminating a standing restriction on access to these tents under certain wind conditions.

RL-0012 Spent Nuclear Fuel Stabilization and Disposition

12.16 Sludge Treatment Project (STP)

- The project issued:
 - KOP Disposition Project Conceptual Design Hazards Analysis (PRC-STP-00098).
 - Updated Hazards Analysis for the K West Basin container sludge sampling (HNF-36473 R2). This included sampling of settler tank sludge and shipping samples in a Type A container in accordance with the Special Package Authorization.
- Completed the draft final Knockout Pot (KOP) In-Basin Inspection Report covering the results of all four inspection phases. The report is undergoing internal review and is scheduled for release by mid-December. The information and observations obtained from the in-basin inspections supports the technical viability of disposing KOP material in Multi-Canister Overpacks (MCOs) for interim storage at the Canister Storage Building (CSB).
- The KOP Disposition project, with support from 100K Operations, completed the additional density optimization testing in 100K. This final data collection effort will be incorporated into the final Phase 4 In-Basin Inspection Report to be issued in December.

RL-0013 Waste and Fuels Management Project

ARRA

13.01 Project Management

- Training continued for the ARRA-funded staff
- Continuing weekly and monthly Recovery Act Reporting

13.04 Mixed Low Level Waste (MLLW) Treatment

- Completed the draft Site Specific Land Disposal Restrictions variance for the P015 drum (beryllium dust) and transmitted to DOE for approval
- M-91-42 TPA:
 - 51.1m³ shipped and 24.3m³ completed during month
 - 8,044m³ shipped and 7,876m³ completed since January 2003 (Base & ARRA)
- M-91-43 TPA:
 - 0m³ shipped and 24.3m³ completed during month
 - 662m³ shipped and 661m³ completed since January 2003 (Base & ARRA)

13.05 TRU Retrieval

- Shipped 2.6 cubic meters (m³) of waste to treatment, storage, or disposal (TSD) facility
- Removed 4.1 m³ of waste from waste trenches
- Disassembly of 3A Trench 17 Boxes 82 and 80
 - Successfully tested weather protection covers for long reach power tools in presence of misting in Simulation Test Site (STS) trench
 - Procured additional tools, tool modifications, and materials based on lessons learned from STS mock-up
 - Completed STS mock-up of Box 82 disassembly and integrated lessons learned into work instructions; presented package to Hazard Review Board (HRB)
 - Excavated and backfilled to prepare trench for Box 82 disassembly
- Installed temporary covers over 3A Trench 17 Boxes 80 and 27
- Continued excavation of 3A Trench 17 Boxes 3 and 12
- Defined schedule and kicked off initial planning activities for removal activities in 3A Trench 8

- Completed Mobile Radioactive Decontamination Unit factory acceptance test and received trailer
- Prepared PU-238 drums
- Received last 3 of 21 concrete shielded overpacks
- Next Generation Retrieval
 - Awarded contract for non-destructive assay (NDA) equipment and services to ANTECH Services
 - Awarded contract for remotely operated Brokk excavator and various end effectors
 - Continued site preparations for Trench 12B; installed expanded asphalt pad
 - Burns and Roe Enterprises, Inc. provided 90% design package for procurement specification for Trench Face Process System
- Alpha Caisson Retrieval
 - The Alpha Caisson Retrieval / Mobile Hot Cell Project Review Board PDRI independent review team kick-off meeting held 11/24/09. Review ratings have been received. Completed internal PDRI self-assessment for Project Review Board PDRI.
 - Finalized development and internal approval of the Functional Design Criteria.
 - Integrated Project risk list with company level risk register.
 - Waste Retrieval System team continued development of conceptual design drawings and reports.
 - Waste Processing System Team, Project Chief Engineer and Operations Manager visited Oak Ridge National Lab 11/19/09 to observe hot cell operations. The objective of this evolution was to evaluate functionality, lessons learned and design application as it applies to the Alpha Caisson project.

13.06 TRU Repackaging

- Repackaged 115 TRU containers at T Plant this period generating 141 offspring drums
- Released 26 drums from on-hold drum list (51 to-date out of approximately 980)
- Completed training for first wave of new ARRA-funded nuclear chemical operators at T Plant in support of TRU Repack Program (NCOs)
- Initiated shift operations November 30

13.07 Waste Receiving and Processing Facility (WRAP)

- Non-destructive examination (NDE) 238 drums
- Non-destructive assay (NDA) 237 drums
- Supported PU-238 activities
- Successfully implemented Master Documented Safety Analysis/Technical Safety Requirements (MDSA/TSR) Rev 6/6A
- Initiated training for the last group of newly hired nuclear chemical operators (NCOs)

13.10 ERDF Additional Capabilities

- ERDF Maintenance Facility received and approved submittals to allow Site Preparation contractor to initiate field work. Site grading, placed over 11,000 cubic yards of structural fill and 500 cubic yards of stabilization rock on the west and southern site boundary. Also placed and compacted over 1,000 yards of top course material at southern end of site (south from future maintenance pad).

- Procurement awarded construction contract for all remaining work scope (with the exception of the site electrical on 20 November 2009. Electrical work scope has been delayed due to design changes proposed to minimize parking impacts along Dayton Avenue.
- The ERDF Maintenance Facility Project issued the Container Saw Horse 90% design for facility review and prepared and issued the ERDF Container Saw Horses fabrication SOW for review.

13.15 TRU Disposition

- Continuing close-out schedule for Hanford TRU program
 - Closed 26 of 56 non-conformance reports (NCRs)
 - Cancelled 9 of 50 procedures
 - Transmitted 38 of 75 boxes of Records to Records Holding Area
 - Finalizing details of records transfers (approximately 20,000) to Waste Isolation Pilot Plant (WIPP)
- Continuing public clearance release process to support Central Characterization Project (CCP)
- Reached agreement on roles and responsibilities between CCP and CHPRC with Hanford Atomic Metal Trades Council (HAMTC)
- Completed final draft of memorandum of agreement and interface agreement with CCP

13.21 Mixed Waste Disposal Trenches

- Shipped two on-site transfers, one ETF Tanker
- Received six offsite shipments, 19 containers

Base

13.02 Capsule Storage & Disposition

- Waste Encapsulation and Storage Facility (WESF)
 - Completed cleanout of 225BG sump and replaced sump pump
 - Continued support to Energy Savings Performance Contract construction demolition and upgrade activities

13.03 Canister Storage Building

- Completed design of Multi-Canister Overpack (MCO) Handling Machine (MHM) fall protection system to resolve employee stop-work

13.07 Waste Receiving and Processing Facility (WRAP)

- Maintained the facility in a safe and compliant condition

13.08 T Plant

- Maintained the facility in a safe and compliant condition

13.08 Central Waste Complex (CWC)

- Completed four off-site shipment, 106 containers
- Completed five on-site transfers, 155 containers
- Received 12 on-site transfers, 305 containers

13.11 Liquid Effluent Facilities

- Received (November) 39 tankers; (CY) 637M gallons
- Treated (November) 0 gallons; (CY) 22M gallons
- 200A Treated Effluent Disposal Facility (TEDF) discharged (November) 1.7M gallons; (CY) 336M gallons
- Maintenance activities
 - Initiated replacement of 92% acid diaphragm valves
 - Completed alignment of Thin Film Dryer (TFD) rotor blades

- Completed preventive maintenance on TFD conveyer and turntable
- Initiated change out of vent header
- Installed rebuilt Reverse Osmosis Pump 60F-P-1A (retest remains)
- Replaced flowmeter on Ultra Violet/Oxidation (UV/OX) unit
- 310/340 Facilities
 - Shipped remaining chemical (FeCL [ferric chloride]) to Hazardous Waste Disposal

13.16 Off Site SNF Disposition

- Slightly Irradiated Fuel (SIF)
 - The final SIF received the new 200E Area Protected Area.
 - The Outside Storage Unit (OSU) plug was pumped full of concrete and the contractor mobilized to begin welding the plug in place.
 - The SIF Project initiated Definitive Design for the Container Restraint System (for Interim Storage Casks located in the new 200E Area Protected Area)Initiated

13.21 Mixed Waste Disposal Trenches

- Maintained the trenches in a safe and compliant condition
 - 218-W-5 - MWT 34 – Completed surface sealing of top of Module 3; created, placed remaining 3 waste containers and commenced pouring concrete lifts into Module 10 waste encasement.

RL-0030 Soil and Groundwater Remediation

30.01 Integration and Assessment

Base

Environmental Strategic Planning

Continued efforts to solicit feedback on the CP Cleanup Completion Strategy from various public and stakeholder interests, and continued preparations for the negotiation of the strategy with the Regulators. Demonstrated the CP Cleanup Completion Strategy site evaluation process for evaluation of individual waste sites. Developed a draft “document hierarchy” for implementation of the Central Plateau Cleanup Completion Strategy. This hierarchy identifies the CERCLA (and supporting documents) which will be produced to support decisions and implementation of the strategy. Initiated a coordinated CHPRC review of the Tank Closure and Waste Management EIS.

Document Review & Standardization

The O&M Plan – Pump and Treat System, EE/CA, and Action Memorandum Annotated Outlines are complete. Regulatory agencies agreed with the O&M revisions and have decided to use the EE/CA and Action Memorandum outlines without commenting due to competing resources. Comments from DOE on the RACR annotated outline are being worked with WCH, and the RD/RA annotated outline comments from EPA are being incorporated.

Risk and Modeling Integration Group

The Outer Area baseline risk assessment approach has been developed and is under review. The 100-N groundwater conceptual model revisions have been incorporated and finalized. The basalt surface map supporting the development of the 200-BP-5 OU conceptual model has been completed.

Modeling software QA procedures were presented to the GAO audit team. An outline for the GW protection technical basis document is under development.

Environmental Database Management

CHPRC letter titled, “Reporting Information to the Waste Information Data System” was sent to the MSA, WCH, and WRPS in response to the CHPRC CAP that addressed Surveillance Report S-09-SED-

PRC- 009, Biological Control Program, Waste Information Data System, and Near Facility Environmental Radiological Monitoring.

CHPRC is working with LMIT to develop prototype software that would allow someone using a portable computer connected to a GPS device to determine the location of the laptop and retrieve information about the Site at that location.

Well Drilling and Decommissioning

ARRA

- Initiated drilling for 171 wells at 100-NR-2; 31 wells drilled to date, 20 wells were drilled in November and eight of the 11 were constructed (completed) in November.
- Continued drilling on the sixth of six 200-ZP-1 extraction wells; five wells are at total depth.
- Initiated drilling the thirty-five RPO wells at 100-HR-3 (H area).
- Initiated drilling two of four wells at 100-BC-5.
- Initiated drilling fourteen wells at 100-HR-3 (D Area); six wells drilled to date; three wells drilled and constructed in November.

Base

- Completed construction and development of all three wells at 200-ZP-1.
- Completed three of five wells at 100-KR-4.
- One well decommissioned in November.

River Corridor

30.10 100-BC-5 Operable Unit

ARRA

Drilling of two of the BC-5 four wells (C7505 and C7506) continued, with C7505 advanced to approximately 178 feet below ground surface (ft bgs) and with C7506 drilled to a total depth of approximately 183 ft bgs. All sampling complete on C7506, and well completion activities will begin in December.

Base

Received formal EPA comments on the Draft A of the 100-BC Decision Unit Work Plan Addendum and SAP on November 25, 2009. Work is underway to incorporate comments into the Rev. 0 version.

In response to the preliminary WCH river-pore sampling results, evaluated additional proposed activities to further refine the conceptual site model for 100-BC. These activities may potentially include additional aquifer tube installations, additional river-pore sampling, groundwater model development, and subsequent model-simulation activities.

At the direct request of RL, planning and preparation activities were conducted to sample the base of the 100-B-27 waste-site excavation.

30.11 100-KR-4 Operable Unit

Base

The following groundwater treatment was conducted 100-KR-4 Operable Unit:

- Approximately 3.2 million gallons at the KR4 pump and treat system.
- Approximately 16.2 million gallons pumped at the KX system.
- Approximately 8.5 million gallons pumped at the KW system.

The KR4 and KX systems remain under construction related to Phase 2 realignment. KR4 Transfer Building 1 remained out of service due to construction; KX Transfer Building 1 operated at reduced

flow due to construction. Approval to proceed with road and pad installation and drilling of the final two wells required to support Phase 2 realignment of the KX and KR4 pump-and-treat systems was received, and construction of roads/pads was initiated.

A draft FRD was prepared for the Phase 3 realignment of the 100-KR-4 pump-and-treat systems and was provided for engineering review. Phase 3 realignment will impact all three systems by adding three new extraction wells to the systems, realigning wells from the KR4 system to the KX system, reducing long line lengths associated with four KX system wells to improve operability, and providing spare extraction well connection capacity to the KX and KR4 systems. Phase 3 implementation is necessary to ensure the 2012 Tri-Party Agreement target for river protection is met.

Both the 100-KR-4 Remedial Process Optimization technical memorandum and the 100-KR-4 Interim Action Monitoring Plan Supplement were provided to RL for review. The K Decision Unit Addendum to the 100 Areas RI/FS Workplan was in final review prior to clearance and release.

Proposed locations for wells required for K Decision Unit remedial investigation and for Phase 3 realignment of the 100-KR-4 pump-and-treat systems were walked down with representatives of the Indian Nations in preparation for upcoming drilling activities. Preparatory paperwork to support installation of the RI wells was initiated. Two of the proposed RI wells cannot be drilled in the approved locations, and alternative locations are being evaluated. Consultation with Tribal Nations regarding three of the four proposed Phase 3 wells continued throughout the month.

30.12 100-NR-2 Operable Unit

ARRA

Drilling of the multipurpose wells continues using sonic drilling methods. As of the end of November, 31 wells have been drilled and completed with three of those being continuously sampled for evaluation of the existing Apatite Permeable Reactive Barrier (PRB).

Base

Awaiting RL approval of the 100-N Eco Risk Document (Revision 1) as transmitted on October 5, 2009. Field preparations for the Jet Injection Treatability Test were conducted with contractor mobilization now complete. Jet Injection activities are expected to begin on December 3, 2009.

While awaiting RL approval on the Draft A Proposed Plan for Amending the Interim Record of Decision, as transmitted on September 30, 2009, RL chose to include WCH material to support the 100-NR-1 OU. This change required a Draft B to be produced. In process to approve, release, and transmit this Draft B version to RL to meet the TPA milestone (TPA milestone M-16-14B, due 12/31/09).

Resolution of the informal RL and Ecology comments continues for the 100-N Integrated Groundwater Sampling and Analysis Plan.

Engineering continues on the design for an injection system for the Apatite Barrier expansion. A 30% design-review meeting was held on November 17, 2009. The 60% design review is planned for December 17, 2009. Additional planning activities, including the production of a Treatability Test Plan, are underway.

Work continues on Draft A of the 100-N Decision Unit Work Plan Addendum to actively address RL concerns. Meetings were held to update RL on the document revision progress. The Draft A documents are expected to be submitted to RL by December 10, 2009 (supporting TPA milestone M-015-61, due 12/31/09).

Phytoremediation and TPH studies are continuing with PNNL as planned. All field data-collection work is essentially complete, and the final reports are being produced.

30.13 100-HR-3 Operable Unit

ARRA

The following groundwater treatment was conducted at 100-HR-3 Operable Unit:

- Approximately 2.6 million gallons pumped at 100-HR-3.
- Approximately 0.8 million gallons pumped at 100-DR-5.

HR-3 operated at below normal levels as the H Area Aquifer Test was completed. The rebound study was extended to examine the influence of the river at high water. Due to the chromium concentrations measured in the RUM wells, two RUM wells are being reconfigured for long-term operation as extraction wells.

DR-5 also operated at below normal flows because two of the extraction wells, 199-D5-20 and -32, were out of service. Construction has now resumed and the well realignment will proceed.

The DX design team completed the formal 90% design review on November 5, 2009. Design comments are being incorporated, and the 100% final design will be issued for construction mid-December. DX will have an operational capacity of 600 gpm with completion of ATP by December 31, 2010, in order to achieve the TPA and PBI. DX and HX systems together provide 1,300 gpm new treatment capacity versus the 1,000 gpm capacity used in the modeling. Ion exchange vessels for both systems are designed to operate on either Purolite A500 or ResinTech SIR-700 resins. BCRs documenting these changes are in preparation.

Long-lead procurements of the ion exchange skids for both 100-DX (6 trains) and 100-HX (7 trains) have been placed. The first two skids for 100-DX arrive in February. A kick-off meeting was held with the fabricator (Monarch Water Systems) in Xenia, Ohio on November 12, 2009. In addition, representatives from engineering, operations, and maintenance visited the Boomsnub Superfund site in Vancouver, Washington to look for lessons learned, operational/design efficiencies. Boomsnub uses the SIR-700 resin planned for use at the 100DX and 100HX pump and treat plants.

DX construction started in July with road crossings, yard piping and well rack fabrication. Ninety six percent of road crossings have been completed. The remaining road crossings next to the process building will be completed when the building contractor has demobilized to avoid congestion hazards. All HPDE piping has been laid and bonded, with the exception of piping tie-ins to the buildings and wells, and piping that will run over land bridges across remediation trenches yet to be completed by WCH. The building contractor has completed the foundations for all three buildings, and started erecting the process building.

Base

Resin tests at DR-5 continued with ResinTech SIR-700 still removing chromium since the first series started on March 10, 2009 (over 54,000 bed volumes through November). The spent resin TCLP test has shown spent SIR-700 to be a dangerous waste, so that stabilization will be required before disposal.

RPO modeling has been completed on five alternatives to the current baseline designed to meet 2012 and 2020 TPA Target Milestones. Alternative 5 is projected to achieve both targets and is being implemented through an approved BCR. It increases the number of new wells from 49 to 70. RPO is now addressing the incorporation of chemical and/or biological remediation into the remedy to accelerate meeting the 2020 TPA target milestone.

Comment resolution on the RI/FS Work Plan and Addendum 1 is nearing completion. Groundwater sampling commenced to support the Decision Unit Risk Assessment was conducted in accordance with a mini-SAP.

30.14 100-FR-3 Operable Unit

Base

Received formal EPA comments on the Draft A of the 100-F & IU-2/6 Decision Unit Work Plan Addendum and SAP on November 25, 2009; work is underway to incorporate comments into the Rev. 0 version.

Central Plateau

30.20 200-BP-5 Operable Unit

Base

The L Well (C7514; adjacent C-1 Crib) and K Well (C5860; adjacent B-6 Reverse Well) were drilled and sampled to depths of 301 and 104 ft bgs, respectively. Drilling of the M well (adjacent B-12 Crib) will start following completion of the L well. All three wells will be drilled to basalt (~380 ft). Completed the planning for depth discrete groundwater sampling of 14 wells in the B Complex Area; fieldwork is expected to start in early December. Revision of the draft 200-BP-5 conceptual model report is in process.

The preparation of the 200-BP-5 Remedial Investigation (RI) Report continued. Supporting activities include a data quality assessment (DQA) of groundwater data and refinement of the hydrogeological physical model for the OU. Initiated work on the 200-BP-5 DQO in support of the 200-BP-5 B Complex Treatability Test Plan.

A technical briefing to DOE, regulators, tribal nations and other site contractors was held November 18, 2009, on the results of the Landstreamer/Gimbaleed Geophone Acquisition of High-Resolution Seismic Reflection data collected in the 200-BP-5 OU north of the 200 Areas. The field activities conducted in June 2009 were a collaborative effort between DOE, the CHPRC, and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) to gather information that would support the refinement of the top of basalt structure in the Gable Mountain Gap vicinity. The results presented by the CTUIR and Montana Tech of the University of Montana were positive for resolving and refining the top of basalt structure and well received by the attendees.

30.21 200-PO-1 Operable Unit

Base

Continued work on the draft remedial investigation (RI) report.

30.22 200-UP-1 Operable Unit

Base

Ecology comments on the Draft A of Revision 3 to the 200-UP-1 OU Groundwater Remedial Design/Remedial Action Work Plan (DOE/RL-97-36, Rev. 3) were received on November 12, 2009, and were minor in nature. Comments are in the process of being incorporated into the final document.

A DOE briefing was held November 5, 2009, to discuss the draft memo-to-file prepared to correct language in the interim 200-UP-1 ROD and indicating that carbon tetrachloride is not an F001 listed waste but instead is a dangerous waste.

The U Plant pump and treat system has been shutdown since October 15, 2009, due to an ETF outage, which is expected to last until mid-December. A well camera survey and redevelopment activity is being planned for early December to enhance extraction well production.

30.23 200-ZP-1 Operable Unit

Eleven of 14 groundwater extraction wells are currently online pumping water at a rate of approximately 250 gpm. Extraction well 299-W15-44 is off line as it will be replaced by new extraction well C7017 (EW-1). Three other extraction wells are offline due to minor technical difficulties that were repaired. Work to get these extraction wells back on line is currently being scheduled.

Approximately 10.8 million gallons of groundwater were treated in November.

Depth-discrete groundwater samples are currently being collected and analyzed during the drilling of six new extraction wells C7024 (EW-4), C7027 (EW-5), C7026 (EW-8), C7494 (EW-15), C7028 (EW-18), and C7029 (EW-19). These well have all reached total depth. Performed WSCF analyses on depth-discrete groundwater samples collected from these wells. The drilling of the next 11 wells will begin soon. The Performance Monitoring Plan/Integrated Monitoring Plan is currently out for RL and EPA review.

Two extraction wells in the vicinity of the T Tank Farm are currently offline as repairs are being made to the ETF facility. These well are expected to be back on line in the next week.

30.24 200-PW-1 Soil Vapor Extraction (SVE)

Base

Active SVE operations have ended for the winter months; passive SVE operations are ongoing. Heaters within the active SVE units are operating to prevent freezing. GAC heater units are on order to help the units operate more efficiently in colder temperatures.

30.30 300 FF-5 Operable Unit

Base

EPA draft comments to the RI/FS Work Plan and SAP Draft A have been received and are being reviewed. Formal comments are expected ahead of the December 29, 2009, scheduled date.

Geophysical testing will continue prior to initiation of infiltration testing during low river stage anticipated to be in February or March of 2010.

30.31 Regulatory Decisions and Integration

ARRA

- Completed drilling and sampling activities on the vadose portion of the “L” well.
- Responded to Agency comments on the 200-BC-1 Treatability Test Report. Preparing Rev. 0.
- Completed geophysical investigations report for four of the 200-SW-2 landfills.
- Completed draft characterization report for 200-SW-2 passive organic vapor sampling at approximately 350 locations in 200-East/West Area landfills.
- Transmitted 200-MG-1 Action Memorandum (Draft A) for 37 remaining waste sites in the outer area to RL for their approval and transmittal to Ecology for review.
- Completed 200-MG-1 Removal Action Work Plan (Rev. 0), including RL and Ecology approvals
- Received Ecology’s approval for the 200-MG-1 Sampling and Analysis Plan for 11 waste sites.
- Initiated a series of technical and regulatory approval path forward meetings in an effort to accelerate the approval process for the NRDWL and SWL closure plans.

Base

- Completed two draft Borehole Summary Reports for boreholes drilled at the 216-A-2 and 216-A-21 cribs plus boreholes drilled at the 216-A-5 and 216-S-1/2 cribs.
- Transmitted Draft C FS for the 200-CW-5 to RL for review and comment.

- Completed Burial Ground Sampling and Analyses Report for July – September 2009 in support of TPA milestone M-91-40, Requirement 2.

30.32 Deep Vadose Zone Treatability Test Project

Base

- Deep Vadose Desiccation Pilot Test: Pilot Test activities for Desiccation are underway with the primary focus on establishing a contract for drilling of 20 boreholes needed for instrumenting and logging for the Pilot Test. The RFP for these boreholes will be issued by December 10, 2009. A Statement of Work has been drafted and will be issued as an RFP for procurement of a dry air delivery system for the project. Additionally, a MSA continues design in preparation for field work for the 13.8 KV power supply needed to operate the three phase 480 volt equipment used in the Pilot Test.
- The Characterization Test Report has been reviewed by RL and comments are now being incorporated, to be followed by technical editing. This test report is anticipated to be transmitted to RL by December 17, 2009, and satisfies a performance incentive goal due January 30, 2010.
- Desiccation Lab Testing: Additional testing has been initiated that will investigate re-wetting as a result of recharge and water vapor transport and will be used to model long term affects of re-wetting desiccated soils.
- Uranium Sequestration Testing: The test report on Uranium Sequestration was transmitted to RL for review and comment and should be returned to CHPRC by December 10, 2009, to be followed by comment incorporation and final editing. This report will be included in a related TPA milestone due on January 31, 2010. Additional testing has been selected to be performed in FY 2010 to support a large scale field test to be performed in FY 2011.
- Soil Flushing: PNNL has written a Test Plan and initiated laboratory testing to evaluate soil flushing as a mechanism to contact targeted contamination in the vadose zone with a leaching solution. The laboratory will be performing these tests to evaluate kinetics and stability of solubilization of Tc-99 and uranium, transport properties of the solubilized Tc-99 and uranium, and impact of vadose zone sediment properties on leaching solution processes. Additional modeling will also be performed to assess distribution, location, and stratigraphic factors that control the distribution of vadose contaminants and movement of injected fluids.
- Grouting: PNNL has prepared a Test Plan and initiated laboratory testing to evaluate grouting as a mechanism to contact targeted contamination in the vadose zone to react, stabilize, or isolate the contaminants. The laboratory will also use these results to model the grouting lab work to assess the distribution, location, and stratigraphic factors that control the distribution of vadose zone contaminants.

RL-0040 Nuclear Facility D&D, Remainder of Hanford

ARRA

U Plant Regional Closure Zone (U Ancillary Facilities D&D)

- Continued demolition preparation activities in 224U and 224UA.
- Continued asbestos abatement activities in 224U and 224UA.

U Canyon Demolition and Cell 30 Disposition

- The first two cells of U Canyon were loaded with designated equipment and cover blocks put back in place.
- Fixative has been applied to 50% of the canyon.

212N/P/R Buildings D&D

- Completed demolition of 212R and 212P.

200-CW-3 Waste Sites Sampling

- Excavation of the first RTD has commenced with 160 tons of soil removed and transferred to ERDF.

ALE D&D

- Completed placement of support trailers.
- Completed waste characterization and Cold and Dark activities on the lower ALE facilities and continued waste characterization and Cold and Dark activities on the upper ALE facilities.
- Continued mobilization activities to support D&D activities.
- Started asbestos abatement activities on the lower ALE facilities.
- Started demolition preparation activities on the lower ALE facilities.

BCCA Waste Site Remediation

- The mobilization for the BCCA excavation has been completed.
- Remediation using “super dump” trucks was initiated with approximately 10,000 tons of soil removed and transferred to ERDF.

Model Group 1 (MG-1)

- The Response Action Completion Report (RACR) for 200-E-110 and 600-21 is in review.
- Analysis of sampling data for 600-36 is complete indicating RTD is required. RTD is anticipated to commence in January.
- Analysis of sampling data for 600-51 indicates RTD is not required. Closure documents are being prepared.
- The Remedial Action Work Plan (RAWP) regulator review continues. Forecast date for review by regulator has impacted start of RTD activities.
- The Action Memorandum for the remaining 23 sites has been prepared and has been transmitted to DOE for initial review.

Base

S&M

- Commenced effort for the B Plant HEPA and pre-filter change out.
- Completed the B Plant annual fan maintenance. Fans will be restarted after the filter change out is completed.

RL-0041 Nuclear Facility D&D, River Corridor

41.02 RC PRC River Zone Environmental

ARRA

- Completed demolition of Mobile Offices MO048 and MO969.
- Continued design of 105KE Reactor Disposition.
- Continued project definition of 105KE Reactor Disposition.
- Continued pre-characterization work of 105KE Reactor Disposition.
- Continued characterization of 115KE, 116KE, and 117KE.
- Continued final disposition characterization at 183.2KW, 183.3KW, and 183.7KW.
- Completed waste characterization of 183.1KW, 183.3KW, and 183.7KW.
- Continued cold and dark at 115KE, 116KE, and 117KE.
- Completed cold and dark at 183.7KW.
- Continues asbestos abatement at 183.7KW.

- Initiated asbestos set-up in the 1706KE/KER below-grade, then suspended work due to structural integrity concerns.
- Remediation continued on 100-K-56, 100-K-47, and 100-K-3 pipelines. 100-K-56 is a 72-inch diameter primary effluent pipeline consisting of multiple pipes that drained various facilities or areas and dumped directly into the outfall or retention basin. 100-K-3 pipeline mixed water to simulate outfall conditions in the river in support of laboratory studies for the effects on fish of radiologically contaminated water discharges into the Columbia River. An electrical duct bank was located under 100-K-47 and 100-K-3, which was determined to be de-energized. The electrical bank was opened and contains asbestos, for which a path forward has been determined. Work to truncate the 105KE from the outfall is in process.
- On UPR-100-K-1 (soils beneath the 105KE Fuel Storage Basin), implementation of the Documented Safety Analysis (DSA) is targeted for full implementation in early January. Continued excavation, demolition, and sizing of piping on the west side of 105KE to support demolition of the rod rack this spring.
- Initiated planning for waste sites around the 183.1KW (high chrome and mercury) and 183.2KW (acid distribution pipe and soils).

Base

- Initiated characterization at 182K.
- Initiated asbestos abatement at 182K.
- Continued cold and dark at 182K.
- Installation of the waste site remediation tent structure is complete.
- Electrical wiring is in progress at the Container Transfer Area.
- Completed waste site remediation mobilization efforts and base support activities.

MAJOR ISSUES

RL-0011 Nuclear Materials Stabilization and Disposition of PFP

Issue Statement – Excessive summer heat and recurring failures of Continuous Air Monitoring Systems (CAMs) impacted the D&D field work teams throughout the summer.

Corrective Action – Engineering previously determined that the best method to improve temperature control in 234-5Z, 236-Z and 242-Z is to install chillers in the yard near 234-5Z and cooling coils in six of the eight supply inlet ducts in room 321. The older style CAMs currently installed in many areas of the 234-5Z building will also be replaced as needed with newer CAMs operating on portable vacuum pumps.

Status – For the cooling upgrade, the statement of work for the chillers was submitted to CHPRC Procurement at the end of the reporting period. The statements of work for the electrical transformer and for the design-build contract are in final approvals. A sufficient number of newer CAMs have been ordered and received, and the older units are being replaced as needed. This is the last report on this issue.

Issue Statement – Delays in hiring, training and qualifying the large number of new staff added at PFP has delayed deployment of all the new field work teams beyond their planned October 1 start date. Some of the new teams have been deployed to the field and the remainder will initiate field work during November and December. Schedule impacts will also be compounded for the near term due to an insufficient number of qualified Radiological Controls Technicians (RCTs) to support the expanding number of D&D field work teams.

Corrective Action – Work around schedules, additional overtime and potentially shift work will be incorporated in an update of the performance measurement baseline to recover lost time on D&D field work. Alternative actions to minimize the impact of the RCT shortage are being evaluated, including on site posting of additional positions, substitution of less radiologically intensive work in lieu of currently scheduled higher risk work, consolidation of work teams/work areas, etc.

Status – All of the new field work team staff have completed block training and are located at PFP undergoing on the job training and evaluation. Training has been initiated for the final group of newly hired RCTs. The impact due to the shortage of RCTs is likely to persist through training and qualification of the last of the newly hired RCTs into April 2010. This is the last report on this issue.

Issue Statement – An additional decontamination process for PFP glove boxes/hoods with contamination etched into the stainless steel by historical liquid chemical processes is not currently available. Technical issues have also been identified with the application of the surface contaminated object (SCO) process to glove boxes with previously inaccessible surfaces.

Status – Six glove boxes previously removed and destined for ERDF disposal have been put on hold pending a technical evaluation. The SCO survey process and non-destructive assay is also being utilized where practical to support glove box characterization and verify conformance with waste acceptance criteria. A comprehensive review of available decontamination processes is continuing, and additional testing will be done for those with high potential to complement the decontamination process currently in use. An alternate process for characterizing and transporting qualifying glove boxes for disposal at Environmental Restoration Disposal Facility (ERDF) as low-level waste has been developed and is being implemented.

RL-0013 Waste and Fuels Management Project

Issue Statement – Retrieved FRP boxes at CWC require improvements for long-term outdoor storage. Deteriorated boxes present potential for contamination spread and loss of containment.

Corrective Actions – Develop options for improved storage; review options with management to select preferred storage option(s); establish priority; develop recovery schedule to complete improvements; design/procure/implement selected options.

Status – Options have been developed, the preferred option(s) has been selected and the priority has been established. The recovery schedule has been completed. Corrective actions are ongoing. Completing interim actions to stabilize boxes is expected to complete in the spring of 2010. This is the last report on this issue.

Issue Statement – Integrity of Retrievably Stored Waste (RSW) containers is significantly less than expected. Increased resources are required to retrieve containers. Retrieval volumes required to meet TPA milestones or PBIs may not be reached.

Corrective Actions – Use multiple crews for concurrent retrieval; redirect resources to alternate retrieval sites; stabilize deteriorated containers pending in trench processing or alternate disposition.

Status – Hired additional staff, implemented multiple trench retrieval activities, and initiated interim stabilization preparations.

Issue Statement – Unknown item has been identified in 4B Trench 10

Corrective Actions – Shifting retrieval operations to another trench pending resolution

Status – Waste removal from 4B Trench 11 is on hold. Information on unknown item is scheduled for February 2010.

Issue Statement – RL determined Trench Face Processing System is a major modification to Low-Level Burial Grounds.

Corrective Actions – Propose tailored approach to DOE-STD-1189 (December 2010). Document impacts of agreed-to approach in letter to RL (January 2010).

Status – Additional documents are required and potential 6-month schedule impact due to required RL review durations.

RL-0040 Nuclear Facility D&D, Remainder of Hanford

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 – RL is conducting meetings with the regulators to determine a disposition path.

Status – Parallel activities of equipment placement and bulk fixative application continue.

Issue Statement – Delays in procurement of super dump trucks for shipping waste to ERDF are impacting Waste Site Remediation in the Outer Zone. A change in direction was received by RL to require all equipment to be purchased by MSA. This has delayed procurement of these vehicles.

Corrective Action – CHPRC is working closely with MSA on priorities and procurement of equipment.

Status – The super dump trucks have been ordered and expected to arrive in January. REA and BCR are being planned to address the remediation delays.

RL-0041 Nuclear Facility D&D, River Corridor

Issue Statement – CHPRC received correspondence from RL on October 14, 2009, requesting a proposal/estimate for removal of the K East and K West Reactor Cores. Additionally, the proposal will include the movement of the K East Reactor Core removal ARRA work scope to Base funding, with equivalent movement of Base activities to ARRA. These actions were originally due on November 9 and 23, 2009, respectively. RL sent an e-mail on November 9, 2009 approving extensions to the requested proposals. RL also clarified due dates would not be established, but deliverables are expected after subcontract audits have been completed and issues properly addressed.

Corrective Action – RL had communicated these actions to CHPRC prior to issuance of the letter request on October 14, 2009, and additionally, the Project has been supporting their Assistant Manager in development of a presentation to gain full project approval. The Project will submit the proposal and estimate as requested per new direction from RL on November 9, 2009, to submit the proposal after subcontractor audit has been performed and issues addressed. Subcontract audit to be kicked off in December after preliminary briefing of proposal with RL.

Status – The Project has assigned a Project Manager and the team has completed the estimating effort. Concurrently, the Project is reviewing the sequencing of facility and waste site demolition/remediation to optimize the near-term removal of not only the K East Reactor Core, but initiation of K West Reactor Core removal preparations as well. The project briefed RL on December 10, 2009, and provided the draft proposal for re-sequencing of facilities and waste site demolition/remediation. The project plans to request a DCAA audit of the proposed KE reactor core removal project in January.

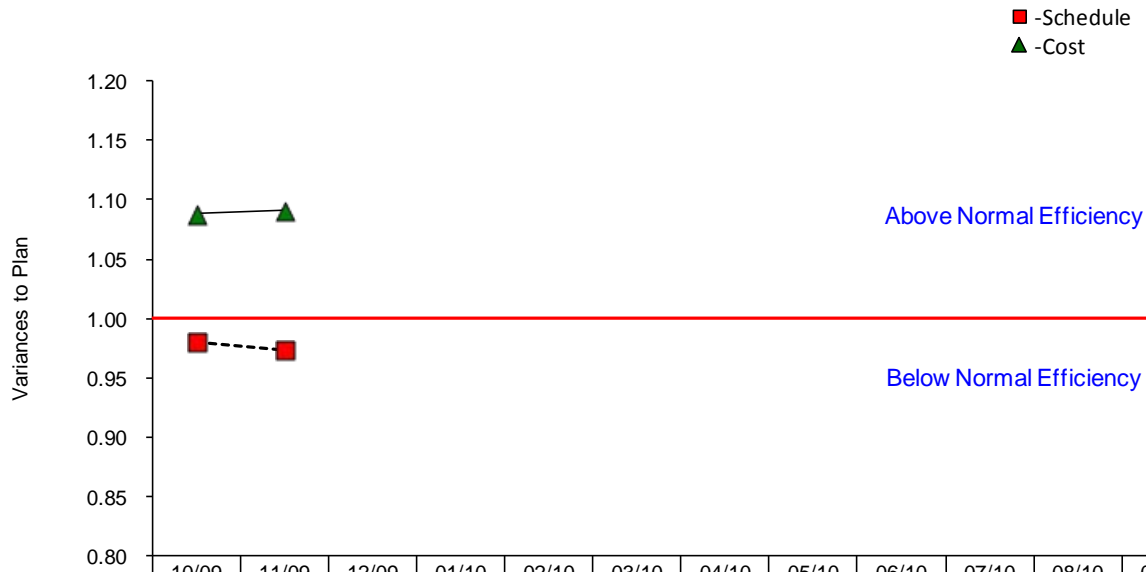
Issue Statement – Due to contamination levels in the soil associated with UPR-100-K-1, overall waste quantities will exceed the original project assumptions. Progress is less than anticipated due to additional radiological control requirements.

Corrective Action – A recovery plan will be prepared to analyze how much of the existing variance can be improved.

Status – Progress improved in November. The BCR and recovery plan remain under development.

EARNED VALUE MANAGEMENT

Schedule and Cost Performance Indices

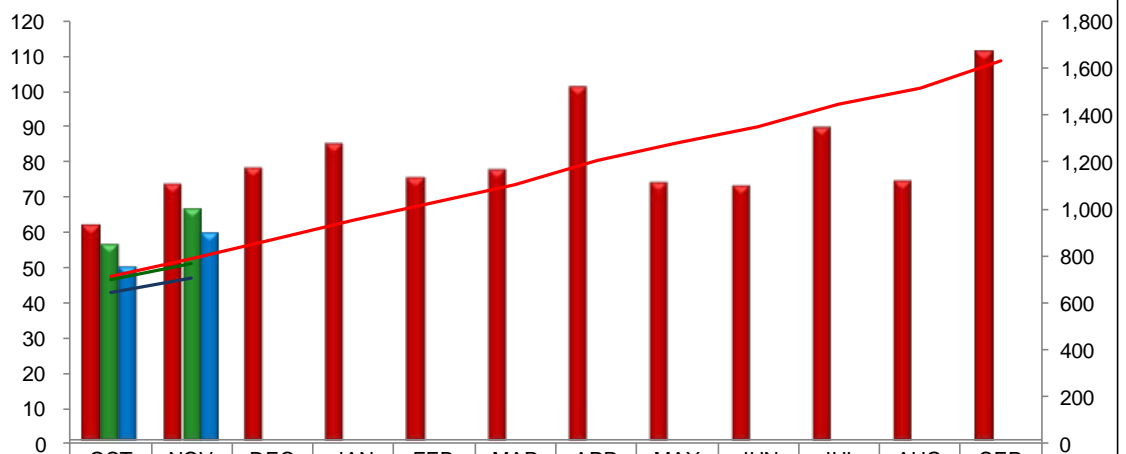


	10/09	11/09	12/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10	09/10
MONTHLY SPI	0.91	0.91										
MONTHLY CPI	1.12	1.12										
-■- CTD SPI (Cum.)	0.98	0.97										
-▲- CTD CPI (Cum.)	1.09	1.09										

Schedule and Cost Performance

Bars: Current Month (\$M)

Lines: Contract To Date (\$M)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY BCWS	62.1	73.4	77.8	85.0	75.4	77.3	100.9	74.1	73.0	89.6	74.2	110.7
MONTHLY BCWP	56.4	66.6										
MONTHLY ACWP	50.3	59.6										
CUMULATIVE BCWS	715.5	788.9	867.0	952.0	1,027.4	1,104.7	1,205.6	1,279.7	1,352.7	1,442.3	1,516.6	1,627.3
CTD BCWP	701.8	768.4										
CTD ACWP	644.8	704.4										

Performance Analysis – November

ARRA Performance by PBS (\$M)

	Current Period				
	Budgeted Cost		Actual Cost ACWP	Variance	
	BCWS	BCWP		Schedule	Cost
RL-0011 - PFP D&D	9.0	7.3	6.1	(1.6)	1.2
RL-0013 - MLLW Treatment	3.3	2.7	2.5	(0.6)	0.2
RL-0013 - TRU Waste	6.6	6.7	5.9	0.0	0.8
RL-0030 - Soil and Groundwater	6.5	6.8	4.8	0.3	2.0
RL-0040 - U Plant/Other D&D	5.2	4.7	4.3	(0.6)	0.4
RL-0040 - Outer Zone D&D	3.3	2.8	2.3	(0.5)	0.5
RL-0041 - 100K Area Remediation	9.0	9.0	4.2	0.0	4.8
Subtotal	42.9	39.9	30.0	(2.9)	10.0
Fee			3.6		
Total			33.5		

ARRA

The unfavorable schedule variance (-\$2.9M/-6.8%) reflects:

- RL-0011 negative variance (-\$1.6M) is associated with delay in field work team qualification and preparation of various documents that must precede the field work (criticality safety, engineering, and work planning). This delay has affected D&D work in 234-5, RMA-RMC and PPSL/Standards Lab, and Balance of 234-5Z. In addition, the extended durations for chemical decontamination of glove boxes HC-230-C-3 and HA-20MB (\$0.3M), high dose rates encountered in the 234-5Z Lab Room 139 work, and delays in PRF planned facility modifications.
- The RL-0040 negative variance (-\$1.1M) is due to delays in the procurement of additional super dump trucks for BC Control Area and 216-N-1, delays in the completion of cultural reviews of the MG-1 waste sites, and with the U Canyon demolition. Resource constraints for U Canyon as well as crane repairs have slowed the canyon deck clearing.
- RL-0013 negative variance (-\$0.6M) is primarily attributable to delays in ERDF hiring, equipment purchases, and maintenance facility activities as well as TRU Disposition activities; partially offset by TRU Retrieval schedule.
- The Primary Contributor to the RL-0030 positive variance (+\$0.3M) is the DX construction activities. This and other variances that exceed the reporting thresholds are as follows:
 - The 100-HR-3 Operable Unit positive variance (+\$1.8M) is due to acceleration of procurement and construction activities for DX. These activities were planned to begin in February 2010.

- The variance (+\$0.3M) is primarily due to efficiencies obtained in Multi Incremental Sampling by using the same contractor who is working the BC Control area. This has reduced the mobilization effort and cost.
- The 200-ZP-1 Operable Unit variance (-\$0.7M) is primarily due to the following factors: 1) continued delays in preparation of the Process facility design resulting from changes in the facility footprint due to updated long lead equipment specification information, and inclusion of the Lime Stabilization system, and revisions to mass balance calculations; 2) delays in road crossing construction, and associated construction support; offset by accelerated performance of electrical well rack fabrication. Originally the delays associated with the road crossings were associated with changing well location which impacted BOP design and material procurement and bid package preparation. Construction is underway with approximately 5 of 65 road crossings complete through November month end; 3) delays in transfer facility procurement, (procurement is underway for the two transfer buildings); and 4) delays in mobilization for Process Facility construction due to delays in bid package preparation resulting from continuing process facility design changes. This scope is not on the critical path and is expected to progress fairly rapidly once started.
- Ramp-up and Transition variance (-\$0.6M) is primarily due to delays in decision on site location, size of facilities and site layout, which has delayed the initial design work and continues to impact schedule as the project is entering in to the construction activities phase. The project baseline for this scope of work is being revised in the PMB, Rev. 2 BCR to implement the final scope decisions with updates to the schedule and budget accordingly.
- (-\$0.4M) Delays in: ZP-1 roads and pads for well construction to support well drilling are delayed due to cultural reviews, and BC-5 well drilling due to late mobilization of subcontractor and additional sampling requirements for the Remedial Investigation/Feasibility (RI/FS) Study. PMB Rev 2 extends drilling durations to account for the RI/FS sampling requirements. The drilling subcontractor will recover the ZP-1 schedule variance utilizing multiple drilling rigs.
- The RL-0041 variance (\$0.0M) is within established reporting thresholds.

The favorable cost variance (+\$10.0M/+24.9%) reflects:

- The RL-0041 positive variance (+\$4.8M) reflects a continued overall trend of above average efficiency in work performance achieved, with the main contributors being facility characterization in preparation for D4; and the K West deactivation debris removal campaign.
- The RL-0030 primary contributors to the positive cost variance (+\$2.0M) are as follows:
 - (+\$0.7M) A positive variance of \$3.0M distributed by weighted percentage to the Base and ARRA PBSs resulted from a directed hold back of RL provided service that will be maintained by RL instead of CHPRC (RL letter 10-PIC-0009, dated November 10, 2009). CHPRC had accrued approximately \$0.9M in October and planned to accrue an additional \$0.9M in November for these activities, that included Bonneville Power Administration, General Services Administration, Occupational Medicine and building rents. The next result of the withdrawal through November was \$1.8M. The remaining \$ 1.2M variance resulted from lower charges for Retiree Insurance premiums and Pension Plan Contributions (\$0.4M); the employee incentive program not yet approved (\$0.3M); lower than planned cost for desktop/telecom services due to lag in hiring of ARRA staff (\$0.3M); and other minor adjustments.
 - 100 HR-3 Operable Unit positive variance (+\$0.5M) is due to accruals from October being higher than actual invoices which resulted in a cost reversal in November. Additionally, efficiencies continue in HR-3 pump and treat activities. It is anticipated that the positive cost variance will continue.

- 200 ZP-1 Operable Unit positive variance (+\$0.4M) is primarily due to the following factors: 1) performance for road crossing construction with no costs incurred; costs were incorrectly charged against the BASE road crossing CACN, 2) performance for electrical well rack fabrication that was costed in prior months, and 3) various miscellaneous offsets. Cost corrections will be done as appropriate. A revised progress payment schedule that aligns with recently awarded long lead equipment contracts will be implemented in PMB Rev. 2.
- The variance (+\$0.4M) is due to the efficiencies realized by assigning Multi Incremental Sampling scope to the same contractor who is working on the BC Control area. The favorable cost variance will be funds managed to cover unanticipated waste characterization sampling cost.
- The RL-0011 positive variance (+\$1.2M) results from material earned as LOE, G&A hold back of services to be provided by RL, and other variances spread across multiple accounts. Consumables budget was increased in FY 2010 to support fully-functioning field work teams (e.g., increased PPE), which is impacted by the delay in field team qualification. The balance is due to over reported progress on the annual cost of solid waste boxes (SWBs) and sample analysis. The positive variance is offset by a negative cost variance from D&D field work teams who charge to the 234-5Z project but are unable to accomplish planned work, due to in progress qualification and limited RCT support.
- The RL-0013 positive variance (+\$1.0M) is primarily due to TRU Retrieval schedule recovery without commensurate increases in cost and efficiencies in TRU repackaging activities.
- The RL-0040 positive variance (+\$0.9M) is due to ERDF and sample analysis billings for O-Zone Waste Sites not being received as planned and as a result of aerial surveys performed on B Zone over 18% of the area was found to be clean and requires no remediation.

Base Performance by PBS (\$M)

	Current Period				
	Budgeted Cost		Actual Cost ACWP	Variance	
	BCWS	BCWP		Schedule	Cost
RL-0011 - Nuclear Mat Stab & Disp PFP	3.8	3.1	4.3	(0.6)	(1.1)
RL-0012 - SNF Stabilization & Disp	5.7	5.1	4.9	(0.6)	0.2
RL-0013 - Solid Waste Stab & Disp	8.2	7.1	7.1	(1.1)	(0.1)
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	10.0	9.0	10.4	(1.0)	(1.4)
RL-0040 - Nuc Fac D&D - Remainder Hanfrd	2.1	1.4	1.5	(0.8)	(0.2)
RL-0041 - Nuc Fac D&D - RC Closure Proj	0.7	0.9	1.3	0.2	(0.4)
RL-0042 - Nuc Fac D&D - FFTF Proj	0.1	0.1	0.0	0.0	0.1
Subtotal	30.6	26.7	29.6	(3.9)	(3.0)
Fee			1.4		
Total			31.1		

Base

The unfavorable schedule variance (-\$3.9M/-12.8%) reflects:

- The RL-0013 negative variance (-\$1.1M) is primarily due to continued delays in Next Generation TRU Retrieval procurements (including planning anomalies).
- The RL-0030 negative variance (-\$1.0M) is primarily due to three main contributors within 100-KR-4 OU: 1) Bioremediation Test Plan and test completion are behind schedule. Remedial Process Optimization (RPO) evaluations indicate the conduct of a bio treatability test will not be a component of the KR4 remedial action. Activities related to the bio treatability test will be removed from the baseline as part of PMB Rev. 2, 2) Equipment/material installation for Phase 2 Well realignment has been delayed due to additional requirements for work process planning as a result of a lock-out/tag-out incident. Work is expected to be recovered later in the fiscal year with no anticipated impact to follow-on work, 3) Completion of Phase 2 facility modifications were also delayed due to the extended time required to address Tribal cultural sensitivities associated with the well locations and the lack of tribal personnel available to complete the cultural review process associated with well siting. As a result, lab analysis/data evaluation work will be delayed until January. Work is expected to be recovered later in the fiscal year with no anticipated impact to follow-on work.
- The RL-0040 negative variance (-\$0.8M) is due to the delayed start of the Cell 30 design. A decision by RL and the Regulators is expected in January as to a plausible disposition path forward for Cell 30. A Baseline Change Request will be initiated once the decision has been made on the path forward.
- The RL-0011 negative variance (-\$0.6M) is primarily due to D&D work in the 236-Z (PRF) facility, with minimal variance from D&D of Building 242-Z and 2736-Z/ZB Complex. PRF delays continue due to previously-reported causes. Electrical issues on the PRF canyon crane identified during reactivation entries have led to more entries than originally planned. Delay in field work team

qualification, along with decontamination of contaminated glove and port ring have impacted the ability to complete the West Gallery glove box internal cleanout. The delay in field work team availability has diverted fifty percent of the gallery glove box team's time to support canyon entries. CAM alarms and contamination cleanout efforts, along with plant drill support, caused delays on the gallery glove boxes and canyon entries. In addition, a three to four week delay has been experienced in PRF due to development of a modified approach to removal of pencil tanks from the facility. The 242-Z and 2736-Z/ZB Complex negative schedule variance result from a delay of available resources to plan and perform the work.

- The RL-0012 negative variance (-\$0.6M) is within reporting thresholds. The following contributed to the negative variance:
 - The STP negative variance (-\$0.6M) is due to: 1) additional testing at PNNL, requested by engineering, to understand the settling times of the sludge (with and without flocculant) for the loading/decanting of the Sludge Transfer Storage Containers (STSCs), which has delayed the characterization report on the K East sludge (Sludge Containerization System [SCS] 240, 250, and 260) and K West sludge from SCS 210 (-\$0.3M); 2) the BCWS for the KOP work scope that was completed in FY 2009 is now catching up, creating a negative schedule variance in both the KOP Phase 4 activities and the KOP design activities (-\$0.3M); 3) the project did not start the refurbishment of the MCO processing systems as planned, as STP and 100K Operations are reviewing all systems to ensure that CHPRC prudently make these investments (-\$0.2M); and 4) these negative variances are offset by the positive schedule variance for the installation and initiation of Construction Acceptance Test (CATs) for the Settler Tank Retrieval systems (+\$0.2M).
- The RL-0041 and RL-0042 variances (+\$0.2M) are within reporting thresholds.

The unfavorable cost variance (-\$3.0M/-11.1%) reflects:

- Various positive and negative cost variances contributed to the RL-0030 negative variance (-\$1.4M). The following variances exceeded thresholds:
 - (-\$0.7M) WSCF cost in November was for October and November WSCF analysis, resulting in an overrun for the current month. Also more sampling was done in October and November than during a typical month compounding the current month overrun. It is anticipated that the sampling cost will normalize for the remainder of the year with no additional growth in the WSCF overrun.
 - (+\$0.4M) Chemical treatment, maintenance, and reporting efficiencies in 100-NR-2 OU were obtained during the month and are expected to result in continued under runs.
 - (-\$0.3M) The negative variance in 100-HR-3 Operable Unit is due to extension of design effort in DX resulting from changes to IX trains, resin, and chemical treatment addition. The overrun in design activities will continue until implementation of PMB Rev. 2.
 - (-\$0.5M) The 200 ZP-1 Operable Unit variance is primarily due to the following factors: 1) road crossing construction costs incorrectly charged against the BASE road crossing CACN, and 2) greater than anticipated costs to prepare the Process Facility Design due to design changes including items such as: provision for mechanical sludge treatment, provision for acid storage system, mass balance calculations for non-COC constituents, LEED certification, and changes in the facility footprint due to updated long lead equipment specifications information and inclusion of the Lime Addition system. Overruns are expected to continue in the design activities and will be covered through funds management.

- (-\$0.7M) The negative variance within the 300 FF-5 Operable Unit is a result of an over accrual for November for PNNL. PNNL has committed to send preliminary accrual input to allow CH overview prior to closure of accrual system each month.
- The RL-0011 negative variance (-\$1.1M) is a result of extra entries being made to reactivate the canyon crane as a result of electrical deficiencies found during investigations, use of overtime to try and recover schedule for the West Gallery glove box cleanout, and delay in field work team qualification to begin work on the East Gallery glove box cleanout on October 1, 2009. In addition, variances in labor to support the min-safe activities at PFP are primarily due to understated budget from the FY 2010 baseline which will be corrected in the submittal of CHPRC Performance Measurement Baseline, Revision 2 in January 2010.
- RL-0013, RL-0040, RL-0041 and RL-0042 variances (-\$0.6M) are within reporting thresholds.
- The RL-0012 variance (+\$0.2) is within reporting thresholds. The following contributed to the negative variance:
 - The 100K Area negative variance (-\$0.4M) is due to K Basins Operations personnel staffed and budgeted as “ready to serve” K West operations activities and STP in-basin activities. These resources were underutilized by STP. Additionally, K East Basin Demolition was charged \$162K of ERDF disposal (belongs in RL-41 Waste Sites Remediation) and \$45K of Motor Carrier Services; there was a high level of support from two estimators working on the PMB Rev2 submittal as well as REA activities; and winter clothing was purchased.
 - The STP positive variance (+\$0.2M) is due to: 1) testing equipment less than planned this month (simulant and pumps not yet procured) (+\$0.1M) and 2) credit invoice accrual received from PNNL this month (+\$0.2M).

Performance Analysis – Contract to Date

ARRA Performance by PBS (\$M)

	Contract to Date					Contract Period		
	Budgeted Cost		Actual Cost	Variance		BAC	EAC	Variance
	BCWS	BCWP	ACWP	Schedule	Cost			
RL-0011 - PFP D&D	63.3	59.3	48.5	(3.9)	10.9	256.9	272.3	(15.4)
RL-0013 - MLLW Treatment	14.0	13.1	10.2	(0.9)	2.9	53.0	44.2	8.8
RL-0013 - TRU Waste	28.8	28.2	29.3	(0.6)	(1.1)	188.2	212.6	(24.4)
RL-0030 - Soil and Groundwater	19.8	25.1	19.3	5.3	5.7	208.1	208.4	(0.3)
RL-0040 - U Plant/Other D&D	56.7	57.0	44.1	0.3	12.9	216.2	203.5	12.7
RL-0040 - Outer Zone D&D	13.5	10.0	6.1	(3.5)	4.0	79.0	79.4	(0.5)
RL-0041 - 100K Area Remediation	45.0	38.0	22.5	(7.0)	15.5	192.0	170.4	21.6
Subtotal	241.1	230.7	179.9	(10.4)	50.7	1,193.4	1,190.8	2.6
Management Reserve						19.8		
Fee			23.6			98.7		
Total			203.6			1,311.9		

ARRA

The Contract to Date unfavorable schedule variance (-\$10.4M/-4.3%) reflects:

- The RL-0041 contributors to the negative variance (-\$7.0M) are delays in completing specifications for ventilation modifications and utility reroutes, and ordering of associated materials; and the directed slowdown in K East Core Removal engineering and regulatory activities pending a review of the overall project strategy at RL/DOE-HQ.
- RL-0011 negative variances (-\$3.9M) are associated with delay in field work team qualification and preparation of various documents that must precede the field work (criticality safety, engineering, and work planning). This delay has affected D&D work in 234-5Z, PPSL/Standards Lab, and Balance of 234-5Z. In addition, delays in procurement of several large pieces of equipment, delays in several planned facility modifications, including establishing more efficient waste routes and relocation of the PFP tool crib out of the 234-5Z, modifications to PRF (elevator), and removal of the Liquid Nitrogen Storage Pad, and late delivery of the PFP Decontamination Trailer are contributing to this negative variance.
- The RL-0040 negative variance (-\$3.2M) is being caused by slower than planned ramp-up of personnel for the U-Canyon Project which has caused the canyon deck clearing to fall behind schedule as well as starting the design of the grouting system; delays in the delivery of super dump trucks for handling waste from BC Control area remediation and 216-N-1 Waste Site due to project startup learning curves, availability of required equipment. These are partially offset by the early procurement of D&D capital equipment.
- The RL-0013 negative variance (-\$1.6M) is primarily due to delays in ERDF hiring and procurements coupled with delays in TRU Retrieval activities caused by the discovery of significantly deteriorated boxes, the inability to make progress while resolving the 85-gallon Overpack issues, a respirator failure and associated recovery actions, and weather impacts. This is partially offset by the acceleration of FY 2010 MLLW treatment and TRU Repackaging activities.

- The primary contributors to the RL-0030 positive variances (+\$5.3M) are as follows:
 - (+\$6.5M) Procurement and construction activities in the 100-HR-3 Operable Unit have been accelerated; these activities were planned to begin in February 2010.
 - (-\$0.9M) The negative variance is primarily due to Ramp-up and Transition delays in decision on site location, size of facilities and site layout, which has delayed the initial design work and continues to impact schedule as the project is entering in to the construction activities phase. The project baseline for this scope of work is being revised in the PMB, Rev. 2 BCR to implement the final scope decisions with updates to the schedule and budget accordingly

The favorable cost variance (+50.7M/+22.0%) reflects:

- The RL-0040 positive variance (+\$16.9M) is largely due to slow ramp up and full implementation of the cold and dark teams and the sampling and characterization (WIF) teams; G&A and Direct Distributable allocations; slow ramp up of staff and subcontractors for the Outer Zone waste sites; efficiencies in demolition and sampling activities, particularly at 212-N, -P and -R, and 200-CW-3 waste sites; slow ramp-up and recognized efficiencies at U-Canyon; 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, coupled with increased insulator staff and overtime to recover schedule. In the waste sites area, slow ramp up of staff and resources, as well as 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.
- RL-0041 positive variance (+\$15.5M) reflects above average efficiency in work performance achieved, with the main contributors being: 1) Facility characterization in preparation for D4, and 2) K West Deactivation debris removal campaign.
- Nearly half of the RL-0011 positive variance (+\$10.9M) is due to overhead allocations including Project Services Distribution, G&A, and Direct Distributables. The project is experiencing a labor rate under-run, which contributes \$2M to the positive variance. This is due to late hiring of ARRA funded staff, overstatement of resources for cross-cutting support, MSA-supplied craft budgeted as labor and costed as subcontract, and delay in completion of facility modifications. The remaining variance is due to delayed procurement of waste containers and metal pallets, overstatement of 222S lab sampling support (\$0.2M), delay in receiving costs associated with waste disposition, delayed subcontract cost associated with the Decontamination Trailer.
- The primary contributors to the RL-0030 positive variances (+\$5.7M) are:
 - (+\$0.9M) Due to efficiencies obtained in drilling for NR-2, and HR-3 wells. Cost efficiencies are being obtained through an aggressive drilling schedule with savings in support personnel, faster drilling methods and the fact that the HR-3 well depths have been less than originally planned. Efficiencies in NR-2 and HR-3 are expected to continue resulting in additional positive cost variance.
 - 100-HR-3 Operable Unit (+\$1.6M) Efficiencies experienced on DX construction, HR-3 pump and treat, and October accruals were higher than actual invoices resulting in a current month cost reversal in November. PMB Rev 2 will address this cost variance.
 - (+\$1.6M) Multi Incremental Sampling savings have been achieved as follows: 1) it has been determined that waste can be direct hauled to ERDF, eliminating the time that would have been needed to develop a container transfer area and avoiding related environmental impacts, 2) using the BC Control area subcontractor reduced the time and scope of the mobilization effort, and 3) existing work planning documents were updated. These include a Health and Safety Plan (HASP), Sampling Analysis Plan (SAP), and waste control plan.

- (+\$1.4M) A positive variance of \$20.4M/18% distributed by weighted percentage to the Base and ARRA PBSs resulted from lower than expected FY 2009 G&A costs due to company level and Other Hanford Pass-backs and lower Other Provided Services to PRC from the MSA assessments coupled with a lag in hiring overhead staff required to support the ARRA program increases during FY 2009. Additionally, continuing delays in Safety and Health programs for Phase II ISMS and finalization of the J13/J14 contracted work scope, Transfer of RL Assessments from PRC to RL in FY 2010, and other minor adjustments such as additional pass-backs from Fluor Federal Services contributed to the net positive variance.
- The RL-0013 positive variance (+\$1.7M) is primarily attributable to efficiencies in MLLW 435.1 Compliance waste disposal activities due to direct disposal vs. planned treatment. This is partially offset by additional allocation for Ramp Up and Transition associated with increased ARRA spending within the PBS. Additionally, TRU Repackaging continues to experience efficiencies which are partially offset by TRU Retrieval project's incurrence of cost while unable to make planned progress due to significantly deteriorated boxes, resolving the 85-gallon Overpack issues, a respirator failure and associated recovery actions, and weather impacts.

Base Performance by PBS (\$M)

	Contract to Date					Contract Period		
	Budgeted Cost		Actual Cost	Variance		BAC	EAC	Variance
	BCWS	BCWP	ACWP	Schedule	Cost			
RL-0011 - Nuclear Mat Stab & Disp PFP	82.6	81.0	83.1	(1.6)	(2.1)	321.8	337.2	(15.4)
RL-0012 - SNF Stabilization & Disp	108.0	109.1	109.2	1.1	(0.1)	532.6	531.0	1.6
RL-0013 - Solid Waste Stab & Disp	163.9	160.1	153.2	(3.8)	6.9	1,601.0	1,619.8	(18.8)
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	140.2	136.2	131.0	(4.0)	5.2	1,143.5	1,133.5	10.0
RL-0040 - Nuc Fac D&D - Remainder Hanfrd	34.8	33.3	29.6	(1.5)	3.7	955.3	948.7	6.6
RL-0041 - Nuc Fac D&D - RC Closure Proj	9.6	9.2	10.0	(0.4)	(0.8)	272.1	268.5	3.6
RL-0042 - Nuc Fac D&D - FFTF Proj	8.8	8.8	8.3	0.0	0.4	25.1	24.2	0.9
Subtotal	547.8	537.7	524.5	(10.1)	13.3	4,851.4	4,862.9	(11.5)
Management Reserve						164.2		
Fee			26.1			71.8		
Total			550.5			5,087.3		

Base

The unfavorable schedule variance (-\$10.1M/-1.8%) is within reporting thresholds and reflects:

- Various positive and negative variances contributed to the RL-0030 negative variance (-\$4.0M). The following variances exceed the reporting thresholds:
 - The primary contributors to the negative variance (-\$1.3M) in 100-KR-4 OU are: 1) Bioremediation Test Plan and test completion are behind schedule. Remedial Process Optimization (RPO) evaluations indicate the conduct of a bio treatability test will not be a component of the KR4 remedial action. Activities related to the bio treatability test will be removed from the baseline as part of PMB Rev. 2, 2) Equipment/material installation for Phase 2 Well realignment has been delayed due to additional requirements for work process planning as a result of a lock-out/tag-out incident. Work is expected to be recovered later in the fiscal year with no anticipated impact to follow-on work, 3) Completion of Phase 2 facility modifications

were also delayed due to the extended time required to address Tribal cultural sensitivities associated with the well locations and the lack of tribal personnel available to complete the cultural review process associated with well siting. As a result, lab analysis/data evaluation work will be delayed until January. Work is expected to be recovered later in the fiscal year with no anticipated impact to follow-on work.

- The RL-0013 negative variance (-\$3.8M) is primarily attributable to delays in next Generation TRU Retrieval procurements, Large/RH package capabilities, ETF fine filter upgrades and returns of W5 waste.
- RL-0011 negative variance (-\$1.6M) is associated with work in the 236-Z (PRF) facility. Specifically, electrical issues identified during investigations have led to more entries than originally planned. Delay in field work team qualification, along with contaminated glove and port ring issues resulting in decontamination activities has impacted the ability to complete the West Gallery glove box internal cleanout. The impact of the delay in field work team availability has diverted 50% of the Gallery Glove box field work team's time to support canyon entries. In addition, a management decision was made for one of the qualified PRF field work teams to perform two weeks of dress/undress training for all PFP D&D field work teams to mitigate ALARA in high risk areas and minimize the spread of contamination. In addition, a three to four week delay has been experienced in PRF due to development of a modified approach to the D&D of the PRF facility.
- The RL-0040 negative variance (-\$1.5M) is due to the delayed start of the Cell 30 design. A decision by RL and the Regulators is expected in January as to a plausible disposition path forward for Cell 30.
- The RL-0012, RL-0041 and RL-0042 variances (+\$0.7M) are within established reporting thresholds.

The favorable cost variance (+\$13.3M/+2.5%) is within reporting thresholds and reflects:

- RL-0013 positive variance (+\$6.9M) is primarily attributable to efficiencies in MLLW Treatment, Liquid Effluents, Slightly Irradiated Fuel, CCP Support, SWOC facilities, and Project Management coupled with a labor reduction (continuity of service). This is partially offset by increased cost for TRU Retrieval activities associated with significantly deteriorated containers and resolution of the 85-gallon drum Overpack issues.
- Various positive variances that did not exceed reporting thresholds contributed to the positive variance (+\$5.2M) in RL-0030. The primary contributors to the positive variance are:
 - Integration and Assessments (+\$1.1M) efficiencies obtained in three control accounts: Remediation Science and Technology is under budget for the (level of effort) horizontal drilling initiative contract - award was delayed resulting in a CTD cost under run; Systematic Planning Integration has achieved efficiencies and used less subcontract resources than planned; and Sample Management and Reporting activities are being performed for less labor than planned. Horizontal drilling is now taking place and this portion of the cost variance will be eliminated over the coming months. Other efficiencies that have been achieved in Systematic Planning Integration and Sample Management and Reporting are expected to continue.
 - GW Monitoring & Performance Assessments (-\$1.3M) overruns are primarily due to FY 2009 WSCF cost that was higher than planned and have been handled through funds management within the project.
 - 100-KR-4 OU (+\$0.9M) efficiencies in KR-4, KW, and KX remedial actions and maintenance activities. These activities will be evaluated for corrective action.

- 100-NR-2 OU (+\$1.1M) Chemical treatment and maintenance scope efficiencies have been obtained. In addition reporting for RI/FS Work Plan and the Interim Proposed Plan have been done for less than planned. Efficiencies are expected to continue.
- 200-ZP-1 Operable Unit (+\$0.8M) variance is the result of the following factors: the Interim Operations Control Account reflects significant progress and cost under runs have been achieved to date for Annual System Calibration. The design of the permanent hookup of well EW-1 (C7017) was lower than planned since we were able to incorporate minor changes 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. Efficiencies have been obtained to-date pertaining to design/construction of the 200W Area P&T, primarily in the areas of RD/RA Work Plan preparation, construction of the Aquifer Test System as well as Aquifer Testing and BOP design preparation.
- 300 FF-5 Operable Unit (-\$1.1M) variance is the result of an over accrual for November for PNNL. This will be corrected in December. PNNL has committed to send preliminary accrual input to allow CH overview prior to closure of accrual system each month. In addition, FY 2009 field studies work was more expensive than planned. The project is evaluating potential funding sources through funds management.
- PBS RL-30 UBS, G&A/DD (+\$1.2M) A positive cost variance of \$3.0M/28.7% distributed by weighted percentage to the Base and ARRA PBSs resulted from a directed hold back of RL provided service that will be maintained by RL instead of CHPRC (RL letter 10-PIC-0009, dated November 10, 2009). CHPRC had accrued approximately \$0.9M in October and planned to accrue an additional \$0.9M in November for these activities, that included Bonneville Power Administration, General Services Administration, Occupational Medicine and building rents. The next result of the withdrawal through November was \$1.8M. The remaining \$ 1.2M variance resulted from lower charges for Retiree Insurance premiums and Pension Plan Contributions (\$0.4M); the employee incentive program not yet approved (\$0.3M); lower than planned cost for desktop/telecom services due to lag in hiring of ARRA staff (\$0.3M); and other minor adjustments.
- RL-0040 positive variance (+\$3.7M) is associated with recognized efficiencies for demolition of the Industrial 7 Project as a result of utilization of existing site equipment and materials; surveillance and maintenance costs less than expected; delay in placement of subcontract for Cell 30 design (expect decision from RL and Regulators on path forward mid January), and under-run in G&A and Direct Distributable allocations.
- RL-0011 negative variance (-\$2.1M) is driven by non-labor overruns, caused by MSC services and min-safe calibration costs. In addition, labor usage contributes an unfavorable, driven by extra entries being made to reactivate the canyon as higher electrical deficiencies found during investigations, the use of overtime to recover schedule for the West Gallery glove box cleanout, and to complete min-safe maintenance activities in order for day shift to focus on accelerated D&D. The unfavorable usage performance is offset by reduced resource requirements for maintenance of the 2736-Z/ZB vault complex and reallocation of resources to support miscellaneous fuels/materials and disposition of un-irradiated and slightly-irradiated fuel. The overall unfavorable cost performance is offset by a labor rate under-run of \$4.5M.
- RL-0041 and RL-0042 variances (-\$0.4M) are within established reporting thresholds.

- RL-0012 negative variance (-\$0.1M) is within reporting thresholds and reflects: A) 100K (-\$3.3M) has two main components: 1) the impact to demolition and waste shipments from the K East Basin excavation has a variance of (-\$1.4M). The effort was completed in FY 2009. 2) K West Basin Operations (-\$2.4M) impacts remaining from implementation of operational controls after a PISA was declared preventing the operation of the IWTS in the K West Basin in prior months and unplanned cost to maintain aging facilities in the 100K Area. These negative variances were offset by efficient performance in other accounts (+\$0.5M). B) The STP positive variance (+\$2.6) is within the reporting threshold. C) The assessment accounts (WBS 12.98 and 12.99) have a favorable variance (+\$0.6M) which is within established thresholds.

FUNDING ANALYSIS

FY 2010 Funds vs. Spending Forecast (\$M)

PBS	Project	FY 2010		Variance
		Baseline Funding	Spending Forecast	
RL-0011	Nuclear Materials Stabilization and Disposition	135.6	120.8	14.8
RL-0013	Waste and Fuels Management Project	105.8	122.8	(17.0)
RL-0030	Soil, Groundwater and Vadose Zone Remediation	146.0	149.0	(3.0)
RL-0040	Nuclear Facility D&D, Remainder of Hanford	161.0	140.6	20.4
RL-0041	Nuclear Facility D&D, River Corridor	122.6	110.5	12.1
Total ARRA:		671.1	643.8	27.4
RL-0011	Nuclear Materials Stabilization and Disposition	58.1	62.0	(3.9)
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	84.7	78.0	6.8
RL-0013	Waste and Fuels Management Project	110.8	94.5	16.2
RL-0030	Soil, Groundwater and Vadose Zone Remediation	146.4	132.7	13.7
RL-0040	Nuclear Facility D&D, Remainder of Hanford	28.7	20.8	7.9
RL-0041	Nuclear Facility D&D, River Corridor	20.3	17.0	3.3
RL-0042	Fast Flux Test Facility Closure	2.5	1.1	1.4
Total Base:		451.6	406.1	45.5
Combined ARRA/Base Total:		1,122.8	1,049.9	72.9

For ARRA Projects, the Revision 2 PMB is anticipated to accelerate work scope into the near term.

The negative variance in RL-0011 Base (-\$3.9M) reflects a newly planned approach in the Plutonium Reclamation Facility (PRF) and continuing min-safe operations in the 2736Z/ZB vaults until the facility is demolition ready in the first quarter of FY 2011. Funds management coupled with efficiencies from implementation of the new approach in PRF will mitigate the variance.

The negative variance in RL-0013 (-\$17.0M) Fiscal year 2010 ARRA expenditures are expected to exceed planned funds due to scope accelerations and the addition of DOE-directed TRU Characterization and shipments to WIPP commencing in March 2010.

BASELINE CHANGE REQUESTS

In November 2009, CHPRC approved and implemented three (3) baseline changes requests. All three of the change requests are administrative in nature and did not change scope, budget, management reserve or fee; see the Format 3 Reports in Appendix A and A-1 for a listing of these specific change requests.

The primary focus in November 2009 was on resolution of RL comments on the PRC Baseline, Rev. 1, and preparation of the Performance Measurement Baseline (PMB), Rev. 2. Consistent with RL guidance and as documented in CHPRC letter CHPRC-0902284A R1, "Contract Number DE-AC06-08RL14788 – Request for Revised Deliverable Dates", dated November 20, 2009, CHPRC is incorporating changes to the PMB for December 2009 using an Advanced Work Authorization (AWA). CHPRC also plans to submit, by January 31, 2010, a revised baseline to RL addressing the PRC Baseline, Rev. 1, review comments previously provided to CHPRC, and other subsequent DOE directed changes. The January submittal will also include risk analysis for each project consistent with the revised baseline, justifying the assigned management reserve for the ten-year period, to at least a 50 percent confidence level.

No change to the Contract Budget Base resulted from the November 2009 administrative change requests implemented into the Earned Value Management System as summarized by fiscal year in the Table below:

November 2009 Summary of Changes to Contract Budget Base

	FY 2009	FY 2010	FY 2011	FYs 2009-2011	FYs 2012 - 2018
<i>October 2009 Contract Budget Base</i>					
PMB	653,429	973,877	890,313	2,517,619	3,527,179
Mgmt Rsrv (MR)	12,359	17,399	6,024	35,782	148,153
<i>Total</i>	<i>665,788</i>	<i>991,276</i>	<i>896,337</i>	<i>2,553,401</i>	<i>3,675,331</i>
<i>Change by Funding Source to Contract Budget Base in November 2009 (3 BCRs)</i>					
PMB					
ARRA					
All ARRA WBSs	0	0	0	0	0
Base					
All Base WBSs	0	0	0	0	0
<i>Change to PMB</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
MR					
ARRA					
All ARRA WBSs	0	0	0	0	0
Base					
All Base WBSs	0	0	0	0	0
<i>Change to MR</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Total Change</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>November 2009 Contract Budget Base</i>					
PMB	653,429	973,877	890,313	2,517,619	3,527,179
MR	12,359	17,399	6,024	35,782	148,153
<i>Total</i>	<i>665,788</i>	<i>991,276</i>	<i>896,337</i>	<i>2,553,401</i>	<i>3,675,331</i>

SELF-PERFORMED WORK

Business structure information documents ongoing compliance with the requirements of the Section H.20 clause entitled *Self-Performed Work*. CHPRC expects percentages for small business to increase as the year progresses.

Contract-to-Date Actual Awards & Mods								Projection through FY18	
10/01/08 thru 11/30/09								Planned Subcontracting*	\$2,524,483,195
Contracts + Purchase Orders + Pcard								Contract-to-Date Awards =	\$866,514,733
Reporting Classification	ARRA		Non-ARRA		Total (\$)	Percent of Total	Goal (%)	Balance Remaining to Award =	\$1,657,968,462
	(\$)	%	(\$)	%				Goal Award (\$)	Bal. to Goal (\$)
SB	\$157,578,433	70.55%	\$273,728,753	42.56%	\$431,307,186	49.77%	49.30%	\$1,244,570,215	\$813,263,029
SDB	\$32,493,368	14.55%	\$39,457,640	6.13%	\$71,951,008	8.30%	8.20%	\$207,007,622	\$135,056,614
SWOB	\$36,520,627	16.35%	\$52,595,759	8.18%	\$89,116,386	10.28%	6.50%	\$164,091,408	\$74,975,022
HUB	\$2,272,044	1.02%	\$11,402,539	1.77%	\$13,674,583	1.58%	3.20%	\$80,783,462	\$67,108,879
VOSB	\$29,682,898	13.29%	\$18,835,643	2.93%	\$48,518,541	5.60%	2.00%	\$50,489,664	\$1,971,123
SDVO	\$1,869,879	0.84%	\$3,088,609	0.48%	\$4,958,488	0.57%	2.00%	\$50,489,664	\$45,531,176
NAB	\$1,218,573	0.55%	\$2,546,740	0.40%	\$3,765,313	0.43%	0.00%	<i>*10-year subcontracting projection</i> <u>PRC clause H.20 small business (SB) requirement:</u> ≥17% of Total Contract Price performed by SB Total Contract Price: \$4,515,556,411 17% requirement: \$767,644,590 Awarded: \$431,307,186 Balance to Requirement: \$336,337,404	
Large	\$49,873,001	22.33%	\$227,755,313	35.41%	\$277,628,314	32.04%	0.00%		
GOVT	\$9,326	0.00%	\$557,128	0.09%	\$566,454	0.07%	0.00%		
GOVT CONT	\$15,892,105	7.12%	\$140,433,022	21.83%	\$156,325,127	18.04%	0.00%		
EDUC	\$0	0.00%	\$14,615	0.00%	\$14,615	0.00%	0.00%		
NONPROFIT	\$119	0.00%	\$645,730	0.10%	\$645,849	0.07%	0.00%		
FOREIGN	\$0	0.00%	\$27,191	0.00%	\$27,191	0.00%	0.00%		
Total	\$223,352,984		\$643,161,749		\$866,514,733				

Notes:

1. Performance in FY 2010 continues to exceed goals in the Small Business, Disadvantaged Business and Woman Owned and Veteran Owned categories. As a result, contract-to-date percentages in those categories continue to exceed the full-term contract goals.
2. ARRA funded awards in FY 2010 exceed base contract awards.
3. Over 93% of the total dollars arise from service and staffing Contracts and Contract amendments with 4.3% of the dollars arising from p-card purchases and 2.7% are purchase orders for materials and equipment.
4. This report excludes blanket contract values which are only estimates and not used for payment obligations.
5. Data is summarized by business categories (WMBE codes) in accordance with socioeconomic reporting requirements. Small business categories overlap and should not be added together.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
CONTRACT			
J.12/C.2.3.6	PBS-13, Transuranic Waste Certification	WIPP provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable and the number of shipments is controlled by DOE-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the Carlsbad Field Office (CBFO).	Ongoing