

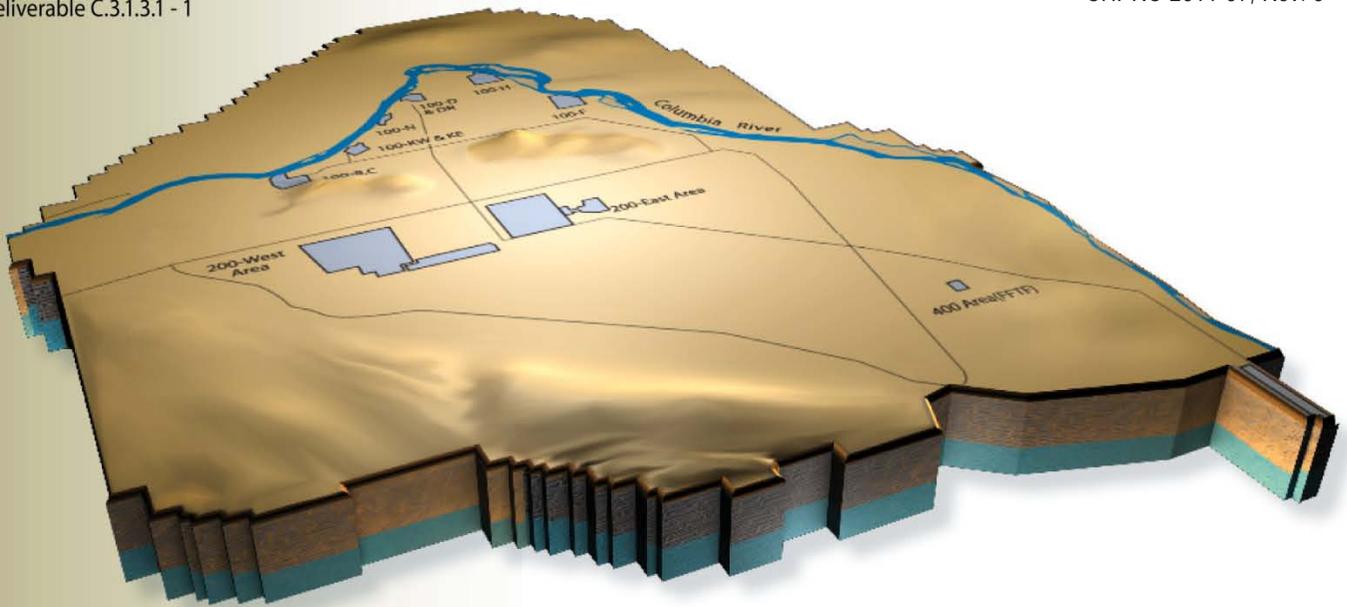


J. G. Lehew  
President and Chief  
Executive Officer

# Monthly Performance Report

U.S. Department of Energy Contract,  
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July 2011  
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## EXECUTIVE SUMMARY

The Waste and Fuels Management Project (WFMP) completed its third Key Performance Parameter ahead of the September 30, 2011 deadline – completing shipment of 1,800 cubic meters of mixed low-level and low-level waste, which is equivalent to approximately 9,000 55-gallon drums. In support of TRU waste activities, the Department of Energy Carlsbad Field Office (CBFO), along with the Environmental Protection Agency and the State of New Mexico, certified the high energy real-time radiography unit that CHPRC in partnership with the Central Characterization Program designed and installed to characterize transuranic waste prior to disposal at the Waste Isolation Pilot Plant.



**Workers prepare a shipment of mixed low-level waste.**

The Decommissioning and Demolition Project team moved the last of four railcars to the B Reactor for display. For nearly a year, the CHPRC D&D project has worked to preserve a piece of history while cleaning up the site by moving and relocating the contaminated railroad cars and equipment. The other 12 cars were moved to the Environmental Restoration Disposal Facility for disposal.



**The last railcar was shipped to B Reactor for preservation and display.**

The Soil & Groundwater Remediation Project completed its Key Performance Parameter to decommissioning 280 wells that were no longer of service supporting the cleanup mission. Final closure documentation is being prepared. The SGRP also celebrated the final truck load of contaminated soil leaving the BC Controlled Area, marking the completion of remediation of Zone A. More than 480,000 tons of contaminated soil and more than 20,000 truck loads were removed from the site using super dump trucks that hold more material, thus reducing worker handling.

The Plutonium Finishing Plant Closure Project team completed electrical deactivation of the 2736-Z/ZB Vault Complex and two adjacent buildings in preparation for demolition. The facility was declared operationally clean in late May, allowing downgrading of the associated nuclear safety systems to begin. The Vault Complex is scheduled for demolition this summer.

The Engineering, Projects & Construction team reached 88 percent completion on the 200 West Groundwater Treatment Facility, the largest pump and treat being constructed on the Hanford Site. The project is on target for completion by year's end 2011. Construction acceptance testing is also in progress on the 100-HX facility, the third treatment facility under construction. As more pumps and facilities go online this year, millions more gallons of contaminated groundwater can be treated per year.

**Focus on Safety**

The monthly President’s Zero Accident Council (PZAC) was hosted by the Safety, Health, Security & Quality (SHS&Q) organization. The July PZAC had three principal themes:

- Eating Healthy
- Summertime Food Safety
- How to Eat in the Heat

Three injury reports were presented and information was provided regarding the upcoming 2011 ISM Workshop hosted by the Hanford site and the quarterly ALARA report.

In July, four “Thinking Target Zero” bulletins were published addressing the following topics:

- Emergency Notifications
- Bugs and Critters
- Universal Waste
- Eat Right in Heat

Additionally, one *Special Safety Bulletin* (SSB) was published which addressed Defective Dumpster Hinges throughout CHPRC on July 29, 2011.

The *Weekly Safety Tailgate* briefing packages for July delivered such relevant topics including: vehicle tire pressures, vehicle fueling (gasoline), extension cord safety, lawn mower safety, President’s Summer Safety Challenge, emergency communications, Voluntary Protection Program (VPP) progress (MERIT recognition), environmental and safety in Hanford clean-up efforts, resetting circuit breakers, managing waste, training, post-holiday safety, and injury/illness and close call summaries. Finally, in support of the



Support Services Employee Zero Accident Council

(EZAC), Occupational Safety & Industrial Hygiene (OS&IH) facilitated the development of a video presentation and communication bulletins relating to traffic and pedestrian safety.



**2011 SUMMER SAFETY PRESIDENT'S CHALLENGE**

Facility: \_\_\_\_\_  
 FOC: \_\_\_\_\_  
 Completed? Yes No

**WATER**

- Is there plenty of fresh, cool drinking water located as close as possible to the workers?
- Is there a plan for refilling water coolers throughout the day?

**SHADE AND REST**

- Are cooling stations/misting areas staged/shade tents - equipment available and in working order?
- Does the team have a plan in place for checking the weather forecast (WBGT monitoring)?

**BUGS AND CRITTERS**

- Is sunscreen/bug repellent readily available to workers?
- Is the CHPRC bugs & critters/heat stress poster posted in high traffic worker areas?
- Does the AJHA include insect/bee hazards & controls?
- Is the worksite free of insect nesting areas (good housekeeping)?
- Do the outside garbage cans include lids (on them to protect from bugs)?

**WORKER REMINDERS**

- Have workers been trained to recognize and prevent heat illness before they start working outdoors?
- Do crews understand summer safety plan warm weather preparations?
- Have workers been reminded to look out for one another and immediately report any symptoms?
- Have workers been reminded to drink water frequently?
- Do workers know and understand the heat stress hazards and controls on their AJHA?
- Is heat stress/insect awareness discussed in pre-job briefings?

**EMERGENCY PLAN**

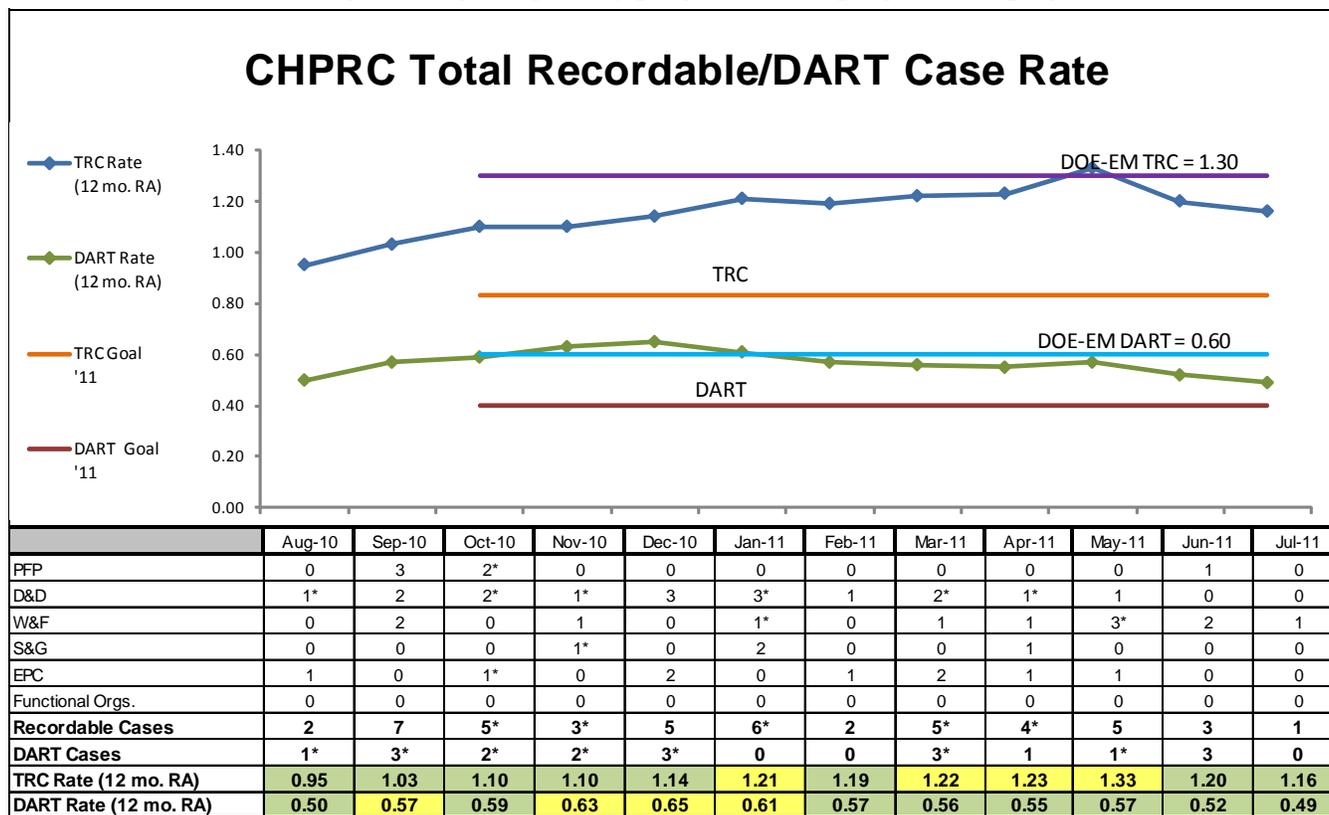
- Does the work crew know who to notify if there is an emergency?
- Can workers explain their location if they need to call an ambulance?

Circle Overall Grade: 1 2 3 4 5  
 Comments: \_\_\_\_\_

CH2MHILL  
 Plateau Remediation Company

## TARGET ZERO PERFORMANCE July 2011

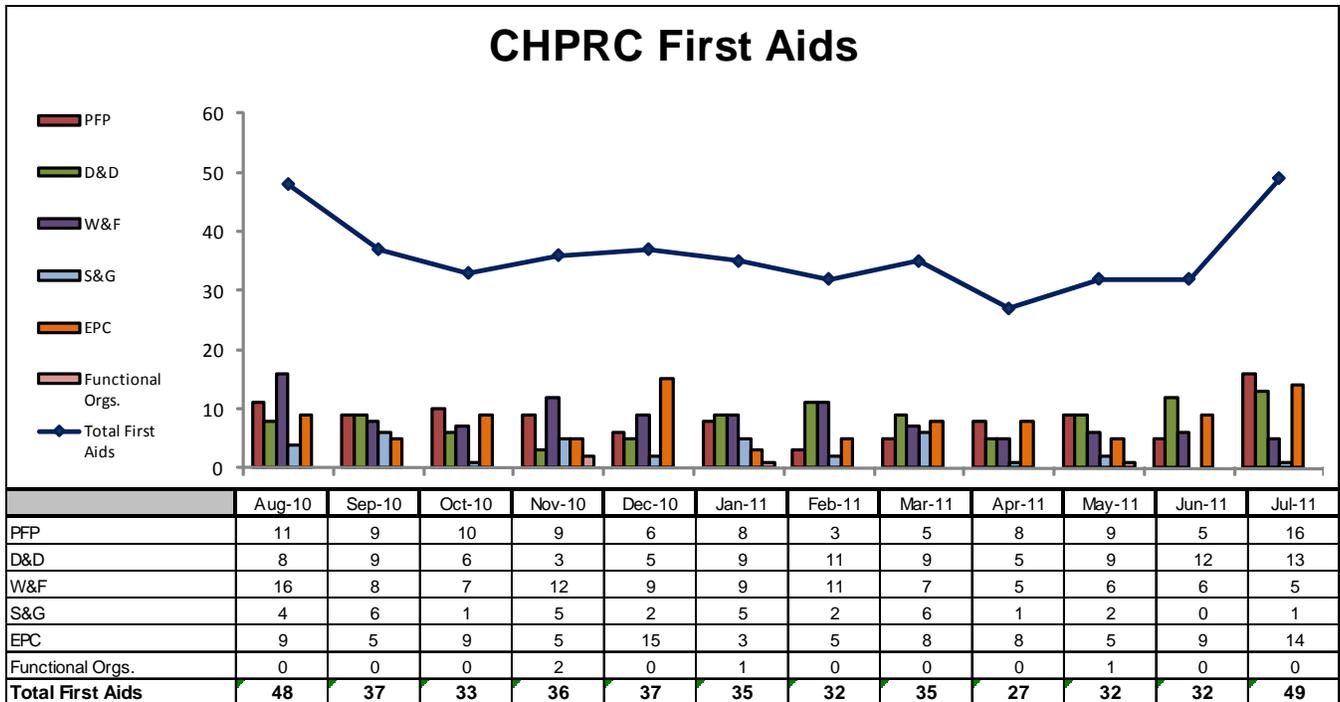
CHPRC continued focusing on integrating safety programs in all program and project areas.



**Total Recordable Injury Case (TRC) Rate** – The 12 month rolling average TRC rate of 1.16 is based upon a total of 50 recordable injuries. There was one Recordable case in July, three new/adjusted Recordable cases (one from December 2008, one from September 2009 and one from May 2011) all of which were DART cases with Days Away. There are currently seven cases under review requiring additional information.

**Days Away, Restricted or Transferred (DART) Workdays Case Rate** – The 12 month rolling average DART rate of 0.49 is based upon a total of 21 cases (11 Days Away, 10 Restricted).

\*The monthly numbers indicated in the chart are updated to reflect the month in which the injury occurred. The rates also capture any changes resulting from reclassified cases or those added as a result of completed investigations.



**First Aid Case Summary** – 49 first-aid cases reported in July. The biggest contributors were 26 sprains, strains and/or pains and 7 Abrasions/Contusions. Of the 26 sprains, strains, and/or pains, most resulted from awkward positions, motion, or overexertion. The 6 insect bites/stings coincide with the return of the warmer weather.

## PROGRAM SUMMARIES

### Safety, Health, Security, and Quality (SHS&Q)

The Central and Project OS&IH organizations partnered throughout the month of July to improve safety performance and reduce injuries by providing regularly scheduled and focused on-site safety assistance and walkdowns. These field visits include daily coverage at the 200 West Pump and Treat construction project as well as periodic coverage at 209E, Trench 12B, 100K, Central Waste Complex (CWC), Waste Receiving and Processing Facility, Low-Level Burial Ground, 284W, Plutonium Finishing Plant, and the Soil and Groundwater Remediation Project sites. In addition to field walkdowns, project support included subcontract reviews, work site assessments, hazard analyses, pre-job meetings, and work observations.

This year’s Summer Safety Challenge occurred on July 21. The President’s team visited the 200W Pump and Treat, CWC, 234-Z, U-Canyon, and Modutanks. The team found that all projects exceeded expectations by implementing controls to meet their own unique summer related hazards. Overall, most workers interviewed appeared to have been adequately trained and knowledgeable regarding the potential hazards and where to obtain supplies. Based on the significant improvement the team observed during this challenge, there was no clear winner and all projects will be rewarded for their excellent efforts.

OS&IH continued its participation in conducting technical accuracy reviews of HAZARD and CONTROL screens within the electronic Automated Job Hazard Analysis (AJHA) system; of note is the development of a medical clearance table to assist field supervision in identifying medical clearances that will be required for specific jobs.

Radiological Protection developed a process to remain compliant while reducing the number of workers who will be required to complete exit bioassays. Radiological Protection worked with Pacific Northwest National Laboratory to streamline the exit process by developing an initial screening that verifies if a worker entered a radiological area that required the triggering bioassay. Based on the results of the screening, a graded approach is executed, waiving some workers from the bioassay and identifying some workers with the highest potential to require the bioassay to be scheduled later in the exit process.

Radiological Protection is developing Computer Based Training to address issues identified during a recent RL surveillance of planning and execution of radiological work. The training will address weaknesses in planning and execution of radiological work and will provide radiological work planners with the necessary knowledge needed to assign the proper engineered control based on the radiological data, type of work activity, and associated hazards with completing the activity.

Emergency Preparedness (EP) conducted 20 EP drills in July, including seven operational drills. CHPRC also successfully passed the Canister Storage Building DOE independently evaluated drill for exercise credit conducted on July 20, 2011.

## **Environmental Program and Strategic Planning (EP&SP)**

### **Environmental Management System (EMS)**

Thirteen EMS targets have been completed this fiscal year-to-date. The remaining 18 are on schedule for completion in accordance with their implementation plans.

Three new EMS targets were added during July:

- 11-EMS-D&D-OB3-T1 (3% reduction in copy paper by STP)
- 11-EMS-D&D-OB4-T1 (Establish a baseline for recycling STP stimulants)
- 11-EMS-D&D-OB4-T2 (Establish a baseline for test basin water recycling)

Three CHPRC abstracts for the September ISM workshop hosted by RL were accepted for presentation.

## **Environmental Protection**

### **Underground Injection Control Wells**

Efforts are underway to support the Hanford-wide effort to assess all of the site's underground injection control wells (UICs) by 2013, per WAC 176-218 requirements. Currently, CHPRC has over 200 wells assigned to it. Under discussion is the scope of the assessment. Discussions will also be occurring on several hundred related to steam lines that contractually are not assigned to any contractor.

### **TPA**

TPA milestone and commitment information related to FY2012 funding for Central Plateau activities are being reviewed with RL and regulators. TPA milestone change requests are being developed in support of TPA negotiations.

Completed and received TPA agencies approval of the last major TPA Change Requests to update Appendix C, which addresses 100 and 300 Area additions, deletions and changes.

### **RCRA Permit Renewal**

CHPRC completed comment/input on all Ecology draft RCRA permit renewal material pertaining to CHPRC affected activities. CHPRC legal staff participated in resolution of some items. Ecology has not yet issued CHPRC SWOC unit draft RCRA permit conditions

## Inspections

Washington State Department of Health (WDOH) performed an annual major stack inspection of Stack 296-B-10 located at the Waste Encapsulation and Storage Facility (WESF) in 200 East Area. No issues were noted, and the inspection report is expected to be issued in August.

Washington State Department of Ecology (Ecology) visited the WRAP facility to follow-up on the actions being taken in response to the leaking container discovered at WRAP's 2404-WB building continued during June. Ecology personnel also made inquiries and requested information about the discovery of liquids during retrieval of drums at the 12B burial ground and about specifications for spill containment pallets.

## Environmental Quality Assurance

### Independent Assessment

Completed the "Use and Control of Information as it Relates to Modeling and Risk Assessment." Final report submitted on July 5, 2011, with two findings and three opportunities for improvement.

## Business Services

The 2011 Inventory of Sensitive Property and Equipment is in its final stage. Field work has been extended until September 1 to accommodate locating some additional items on the PFP Project. There are 6,879 items to be inventoried valued at \$124M. To date, 6,822 (or 99 percent) of the items have been accounted for. There have been items confirmed as unlocated with a value of \$16K.

Facilities and Property Management has developed a detailed schedule for the removal and return of ARRA leased mobile offices. The first group of units located at 4<sup>th</sup> and Baltimore and the 284E Powerhouse site in 200E are scheduled for return in mid-August, to be followed by units in 200N and the 209E D&D site. The balance of units will be scheduled for removal following work force restructuring.

The procurement group awarded 50 new contracts with a total value of \$5.6M, amended 442 existing contracts with a total value of -\$276,551, and awarded 436 new purchase orders valued at \$989K to support Base/ARRA acceleration objectives.

As measured at the end of the first 34 months, procurement volume has been significant; \$1.736B in contract activity has been recorded with approximately 49% or \$849M in awards to small businesses. ARRA funded activity totals 44% or \$755M of the grand total. This includes 5,203 contract releases, 10,042 purchase orders, and over 175,500 P-Card transactions.

Procurement sent several communications in July to BTRs, addressing ARRA funded Contracts and how to deal with the ARRA funding ending. Information included items to consider for ARRA close-out such as demobilization, rental returns, lease closeout, etc. In addition, a list of all active contracts was sent to all BTRS to assist in determining extensions of contracts and other for fiscal year end activities.

Procurement completed a Management Assessment on the Contracted Labor Process. The assessment surveyed the current approaches for (1) BTR review of resumes to determine if the process is optimized, (2) Personnel Requisition interfaces to see if clear and concise interface takes place and (3) ground rules for non-compete versus use of pre-selects is being optimized. The assessment confirmed that the improvements to the CLR process did optimize the BTR review. It also indicated that while the Personnel Requisition could be more user friendly the interfaces and hand-offs are working well. Additionally, the results indicate that competition is being optimized.

Results of IA11-10, Purchasing Card audit, showed continued substantial improvement for the second P-Card audit in a row.

P-Card file documentation has been reviewed, scanned, and uploaded into the Integrated Document Management System (IDMS) through March 2011. Work on April records continues.

Provided Asset Suite (PassPort) Training to 100K Intern Kevin Kronvall. Kevin is assisting 100K DA's in identifying Spare Parts that may require replenishment.

Communicated two software bugs discovered in Asset Suite software to LMSI.

Material Services Interns assisted the Procurement organization in populating REA IDMS folders with Contract, PO, Material Request, Cat ID, and P-Card information for both STP and ZP-1. Custom queries were created to help facilitate the effort.

Met with the Procedures Group to update PRC-PRO-EN-129, *Controlling Spare Parts Inventory*.

Created several custom queries for 100K management.

Working with MSA to complete a "Right Sizing of Material Inventories" inquiry on Spares and Convenience Storage. The list, split into logical pieces and ordered by Facility, Material Analyst Groups, and Parent Piece of Equipment, was sent to the Chief Engineers and Design Authorities for review. As of the time of this writing, all but a handful of the parts lists have been dispositioned and either marked to excess or retain. The goal to have all affected parts dispositioned by the end of August will be met.

Assisted EPC create sound QAIP's for respiratory gear.

Five Declaration of Excess documents were created and sent out to the field for review signature. The value of these DOE's will be reported in next month's report.

### **Prime Contract and Project Integration (PC&PI)**

Working with the associated Projects, Contract Compliance and Change Management (CC&CM) supported the DOE requested KPMG audit of CHPRC's responses to the DOE sponsored KPMG audits of change orders #9 (*Sludge Treatment Project*) and #30 (*200-ZP-1 Operable Unit Operations and Maintenance*) findings. This included supporting the KPMG audit team during their July 18 – 28, 2011 field visit and continued at month end.

CC&CM and the EPC Project continued their efforts in support of the DOE sponsored DCAA audit of CHPRC REA 000.005, *Support Trailers*.

Working with the Soil & Groundwater Remediation Project, CC&CM completed the following Change Proposals:

- CP 030.1089, *Underground Injection Control (UIC) wells*, in response to Change Order #068. This Change Proposal was formally submitted to RL on July 14, 2011.
- CP 106, *100-BC-5 and 100-FR-3 Engineering Evaluation/Cost Analysis (EE/CA), Draft A, and Action Memorandum (AM), Decisional Draft*, in response to Change Order #101. This Change Proposal was formally submitted to RL on July 26, 2011.
- CP 1046, *Implement Interim Actions for the 200-UP-1 Operable Unit - S/SX Pump and Treat*, in response to Change Order #107. This Change Proposal was formally submitted to RL on July 29, 2011.

Working with the Waste and Fuels Management Project, CC&CM completed Change Proposal CP 1139, *Transuranic Waste Drum Venting Requirements*, in response to Change Order #0139. This Change Proposal was formally submitted to RL on August 1, 2011.

Efforts continued on implementation of the recommended corrective actions resulting from the Management Assessment of the effectiveness of CHPRC PRC change management processes and deliverables issued in June. As of August 5, 2011 13 of 24 corrective actions were complete.

During July, Change Proposal preparation kick-off meetings were held with the responsible projects for Change Order 135/CP 030 135 2011 - Bioassay Work and Change Order 90 - Initiate OU Decision Documents for the 300-FF-5 OU. During these meetings roles and responsibilities and action assignments for preparation of these Change Proposals were discussed. These discussions have been documented in the Change Proposal's Estimating Plans. The Holding of Change Proposal kick-off meetings and development of formal Change Proposal Estimating Plans are two of the ongoing process improvements implemented by CHPRC to improve the quality of CHPRC Change Proposals.

During July, Contract Compliance received and processed 5 contract modifications (numbers 165, 173, 174, 176, and 181) from RL. The Correspondence Review Team reviewed and determined the distribution for 78 incoming letters and the Contract Compliance Manager reviewed 62 outgoing correspondence packages.

Efforts continued on the tasks associated with implementation of the Timberline estimating software, including documentation of steps required for implementation, identification and creation of standard templates for repetitive site work, and software training for cost estimating staff.

PC&PI finalized the annual update of the Performance Measurement Baseline for FY2012 based on the target funding profile provided by RL. Initial planning for FY2013-FY2018 PMB update began.

### **Engineering, Projects and Construction (EPC)**

Central Engineering (CE) conducted the technical assessment for the CHPRC Readiness Assessment Implementation Plan for 221-U Canyon D-10 Tank Removal and the DOT 7A Type A Shipping Container which will house the D-10 Tank.

CE participated as a part of a Parent Organization Oversight Committee (POOC) review of Conduct of Engineering for NSTec at the Nevada National Security Site (NNSS) June 20-24. The POOC focused on Engineering Department Performance, the Engineering Organization Structure, and Engineering Program performance. The final report was delivered to the NSTEC Chief Operating Officer July 15, 2011.

CE led the Semi-annual Energy Facility Contractors Group (EFCOG) Engineering Practices Working Group (EPWOG) teleconference. The teleconference summarized activities since the April meeting in Washington D.C., shared information related to the June Annual EFCOG meeting in Washington D.C., and discussed plans for the joint EPWOG/Safety Analysis Working Group (SAWG) Fall meeting October 25/26 in Albuquerque.

CE reviewed and provided comments on the draft ZP-1 Power System Study report for the 200 West Pump and Treat Reclamation Project. This calculation was performed by CH2M Hill corporate resources using Power Tools for Windows software package.

CE continues to participate with DOE HQ team in the update & revision of DOE-STD-1020-2002, Natural Phenomena Hazards Design and Evaluation Criteria for DOE Facilities. The proposed revision will be DOE-STD-1020-2011 (same title), and will incorporate the seismic requirements defined in DOE-STD-1189. The team worked on the response to DNFSB & EPWOG comments.

CE staff attended two webinars and a two day class on Corrosion sponsored by Washington River Protection Solutions and presented by Dr. Frankel the Director of the Fontana Corrosion Center at the Ohio State University at the PNNL Environmental Molecular Science Laboratory's (EMSL's) auditorium.

A presentation was provided to the Engineering Leadership Team (ELT) describing the upcoming roll-out of an Electronic Nonconformance Report (NCR) process. The process is currently available in "Training mode" on the CHPRC QA web page for users to test and practice with. The electronic version mimics the current paper process.

CE provided Nationally Recognized Testing Laboratory (NRTL) evaluation/resolution support for the following:

- 200W P&T field engineering to evaluate a CSA labeled Flowserve electric solenoid actuators for NRTL acceptability. Actuators were Authority Having Jurisdiction (AHJ) Approved after it was verified that they were listed by Factory Mutual.
- PFP on a Non-NRTL labeled ENERPAC electric powered hydraulic pump. Pump was AHJ approved after verification that the ENERPAC model number was TUV SUD listed.
- CE prepared a Non-NRTL AHJ Approval package for Hand and Foot monitors from Thermo Fisher Scientific. The monitors were determined acceptable based on a previous Hanford AHJ evaluation and approval. AHJ approved forms were sent to AVS to assist with QAIP acceptance.
- CE assisted the 100K asbestos abatement team in seeking an acceptable water sprayer for insulation work. CE proposed a vendor that had a DC powered unit with a UL listed/labeled 120VAC charger and the asbestos team accepted the recommendation.
- CE assisted the Hammer Training Facility in evaluating a particle generator for respirator fit testing. CE prepared an AHJ Approval package and the particle generator was approved for use.
- CE evaluated a Non-NRTL Vue-More HD100 turntable. The vendor has an NRTL listed motor available, but requires purchasing a larger turntable to receive the listed motor. PFP NDA is currently determining if the larger unit will meet their requirements.

Engineering is providing support to the Type A Container Procurement Assessment. All field work has been completed and the draft of the assessment report is being prepared.

The CE led Hanford Welding Program (HWP), Center of Expertise (COE) met to review and discuss Site welding needs and issues. One of the items brought up for review is a draft for a new Visual Inspection (VT) procedure. The draft addresses VT performance and documentation and will be incorporated into the Site Welding Manual.

CE, AVS and 200W P&T field engineering performed a receipt electrical inspection of the Stabilization Control Panel. Inspection was completed and results were transmitted to 200W P&T system engineering for resolution.

CE recommendations to the HX P&T Project in responding to a CPVC pipe that sustained a hairline crack during Construction Acceptance Testing (CAT) were implemented and CAT resumed.

At the request of Washington Closure Hanford, CE prepared arc flash calculations and protective device settings for the new 385 Booster Station located in the 300 Area. This work was performed using the Engineering Services work order between WCH and CHPRC.

Engineering is incorporating System Engineers' comments into the next revision of procedure PRC-PRO-EN-24208 (HEPA Filter Degradation Evaluation Process).

CE is working closely with the MSA Fleet Mechanics to qualify an overlay welding procedure for repair of heavy equipment needed for D&D operations.

CE participated in the Seismic Summit Meeting, sponsored by ORP & RL to discuss, evaluate, and determine the present technical seismic baseline for the Hanford Site.

CE provided support for Hanford Site Electrical Safety Board committee meetings to resolve comments on DOE-0359, Hanford Site Electrical Safety Program.

### **Communications**

Continued Workforce Restructuring communications, including advertisements for workforce and upcoming job fair, updates to the intranet, change management workshops, and a biweekly bulletin keeping workers update to on the schedule and available resources.

Routine communications included InSite videos (four episodes), On the Plateau newsletter, Recovery Act Update newsletter, and EMS challenge information.

### **Media Relations**

Responded to media inquiries related to CHPRC workforce restructuring self-select program that reinforced workforce reduction announcement shared in January.

Collaborated with RL public affairs in issuing news release, photography and video clips of Mixed and Low Level Waste (MLLW) activities. News release resulted in local, regional and trade publication coverage.

Collaborated with RL public affairs in preparing news release and photo gallery on groundwater cleanup for posting on Hanford Site Facebook page.

### **Recovery Act**

Videos produced in July included shipping a railcar to the Environmental Restoration Disposal Facility, 100K East and West River Pumphouse demolition, workers meeting a waste shipment goal, final truck load of contaminated soil leaves BC Control Area, and North Slope debris removal nearing completion.

Supported RL media (press release, social media updates, photos, and video) covering the Waste and Fuels Management Project's completion of the third Recovery Act KPP to ship 1,800 cubic meters of mixed and low-level waste for treatment and disposal. The accomplishment was featured in a DOE-EM Recovery Act News Flash as well as the Tri-City Herald and Seattle DJC Newspaper.

The July issue of the DOE-EM Recovery News newsletter highlighted how CHPRC Recovery Act projects are achieving the DOE Journey to Excellence goals. For future issues, CHPRC submitted a profile on a Recovery Act hire Aaron Churney.

### **Public Involvement**

Planned and coordinated public involvement process for the Proposed Plan for Remediation of 200-PW-1, 200-PW-3, 200-PW-6, and 200-CW-5 Operable Units. This included coordinating the release of the document for a 30-day comment period and planning and coordinating four regional (Richland, Seattle, Hood River, and Portland) public meetings.

## PROJECT SUMMARIES

### **RL-0011 Nuclear Materials Stabilization and Disposition**

The Plutonium Finishing Plant (PFP) Project continues to maintain PFP facilities compliant with authorization agreement requirements.

#### **ARRA**

Removal of plutonium-contaminated process equipment continued as a top priority in readying the PFP Complex for demolition, with a particular focus on removal of gloveboxes and associated piping and ductwork from the process and lab areas. Glovebox Deactivation, Decommission, Decontamination, and Demolition (D&D) is complete in the backside vault rooms, Standards Laboratory, Analytical Laboratory, and the Radioactive Acid Digestion Test Unit (RADTU). A total of 130 gloveboxes have been removed to date with Recovery Act Funds. Of these, 117 have been shipped out of PFP for treatment or disposal and one has been set aside and staged for size reduction and disposal as transuranic (TRU) waste. Two gloveboxes (179-4 and 179-6) were shipped to an offsite treatment facility for size reduction.

The work to complete electrical isolation of the 2736ZB complex was completed by PFP personnel. Balance of Site personnel have completed verification and air gapping of conduits between the buildings for three of the six buildings. These include 2721-Z, 2731-ZA and 2736-ZC. Radiologically clean demolition equipment has been deployed and is staged awaiting demolition of the three buildings. Protective boxes have been fabricated and installed to protect vital equipment during demolition.

The final two gloveboxes (179-1 and 188-1) were removed from the Plutonium Process Support Laboratories (PPSL). This completes removal of all 116 gloveboxes and hoods in the three PFP laboratories and backside vault rooms of 234-5Z, which is now undergoing general area clean out. Seven rooms were inspected and verified as complete in support of the Key Performance Parameter for 234-5Z Ready for Demolition (KPP-1).

Glovebox removal work is ongoing in the Remote Mechanical A (RMA) and Remote Mechanical C (RMC) Lines. Gloveboxes HA-15, HA-16BS and HA-16CS were removed. A large airlock was removed from the west end of the HC-2 conveyor, enabling work to begin on preparing the 60'-long conveyor glovebox for removal from Rooms 230A, 230B, and 228C. External isolations and process equipment removal continued. Significant radiation dose rates and high contamination levels are challenging the D&D teams in these areas.

Work was resumed to remove highly contaminated process solution transfer lines from throughout the 234-5Z building, and 11 feet of piping was removed, bringing the total removed to date to 502 feet. Process vacuum system piping removal remains on hold in support of high-priority KPP 234-5Z Ready for Demolition work scope in the process and lab areas, and total removed remains at 1,210 feet. Insulator crews removed 201 feet of asbestos from piping and ductwork, bringing the total linear footage completed at PFP with Recovery Act funds to 14,654 feet.

As the pace of D&D work has accelerated at PFP, so have waste generation rates. CHPRC has now shipped approximately 3,415 cubic meters of waste from PFP with support from Recovery Act funds, including 2,747 cubic meters of low level and mixed low level waste, 641 cubic meters of TRU waste, and 27 cubic meters of nonradioactive waste.

Work to remove more than 200 contaminated HEPA filters from deactivated filter rooms 311 and 316 has been delayed until resources can be made available from the vault complex.

## Base

**236Z Plutonium Reclamation Facility** – The Standard Waste Box (SWB) containing pencil tank assembly 20 (Tank 20) was shipped to the Central Waste Complex (CWC). Size reduction of pencil tank assembly 24 (Tank 24) was completed and the segments placed into an SWB. The last two segments of pencil tank assembly 17 (Tank 17) were sealed out and placed into a SWB. Size reduction of pencil tank assembly 23 (Tank 23) was completed and the segments are ready for seal-out of the canyon.

On Sunday, July 24, 2011, the canyon crane failed during movement to retrieve the counter balance to install on the Tank 23 strongback. A loud noise was heard from inside the canyon when the crane motion switch was moved to either the east or west directions. Troubleshooting activities were initiated.

## RL-0012 Spent Nuclear Fuel Stabilization and Disposition

The 100K Operations staff completed the initial processing of all knockout pot (KOP) material through the pretreatment processes. This included the size reduction portion of the process and the removal of aluminum wire from the material retained in the screened canister during the size reduction process. The technical staff is analyzing the results, working with the operations staff to further optimize the condition of the remaining material before declaring pretreatment complete, which is expected by the end of the calendar month.

100K Operations personnel continued training activities at the Maintenance and Storage Facility (MASF) on the KOP Processing System (KPS) equipment in preparation for the 2012 KPS campaign. Operations personnel continue to provide feedback and have been instrumental in optimizing operations to be conducted in the basin. Their feedback is critical to maintaining ALARA goals ensuring equipment and tools are ergonomically sound and available to support completion of TPA Milestone M-016-172 for removal of KOP material from the 105KW Basin by September, 2012.

An internal review of the KPS Final Design Report was completed. Review team comments will be reviewed and incorporated by the end of the calendar month, with the Formal Design Review scheduled to begin in early August.

The Integrated (TRL-6) Test continues. K East simulant (the second of three simulants planned) was completed and settler tank simulant (the third simulant planned) was initiated. The first sludge transfer storage cask (STSC) of settler tank simulant was successfully retrieved. In addition, overflow recovery testing was successfully completed.

The Engineered Container Retrieval and Transport System (ECRTS) Preliminary Design Human Factors Review was performed this month. This facilitated review included STP ECRTS project personnel and personnel from K West Operations, Radiation Protection, Industrial Safety, and Engineering. The results of this human factors review will be documented in the ECRTS Preliminary Design Report and will be reflected in the ECRTS final design.

RL approved the reauthorization of the One Time Request for Shipment (OTRS) utilizing the multi-canister overpack (MCO) cask. The OTRS approval letter also authorizes combining the two planned payloads into a single MCO, provided that STP is able to demonstrate the combined payloads can be shown to remain sub-critical. Two adequacy of Criticality Safety Evaluation Report (CSER) Forms (ACF) were prepared to evaluate the criticality safety of the combined payloads (providing a basis to allow J and/or C metal to be combined in the same scrap basket with highly-enriched SPR fuel). These were approved and released.

The Draft K East (F-SPA) Checklist was revised to reflect the new fissile gram equivalent (FGE) concentration of 172 derived by using the new F-SPA methodology provided by RL. The K East sludge payload is now under the F-SPA FGE limit of 1200. The revised draft checklist was released for an internal CHPRC review.

Cold Vacuum Drying Facility (CVDF) Operations continued to perform Operator training on the MCO Canister System (MCS) simulator in order to support processing the scrap fuel MCO. In addition, CVDF Operations continued working routine maintenance and repair packages on processing equipment to maintain the facility in a ready state for processing the scrap fuel MCO.

### **RL-0013 Waste and Fuels Management Project (W&FMP)**

The W&FMP focused on delivering safe, compliant performance.

#### **ARRA**

Work is nearing completion on a “middle-ware” utility to provide an accessible, user friendly and comprehensive interface for waste inventory, forecast, and reporting data. Completed the Key Performance Parameter (KPP) to ship 1,800 cubic meters (m<sup>3</sup>) of Mixed/Low Level Waste (MLLW) to a treatment facility. M-91-42 /435.1– shipped 48 cubic meters (m<sup>3</sup>) to processing, (1,283) m<sup>3</sup> total under ARRA) and completed 31 m<sup>3</sup> during the month (1,101) m<sup>3</sup> total under ARRA); M-91-43 – shipped 36 m<sup>3</sup> to processing (534 m<sup>3</sup> total under ARRA) and completed 121 m<sup>3</sup> during the month (316 m<sup>3</sup> total under ARRA).

Transuranic (TRU) Retrieval removed 147.8 m<sup>3</sup> of contact handled (CH) TRU waste from the trenches and shipped 215.6 m<sup>3</sup> of CH TRU waste to a Treatment, Storage, and Disposal facility (1,769 m<sup>3</sup> total under ARRA). Next Generation Retrieval (NGR) removed 271 drums and 22 boxes (62.4 m<sup>3</sup>); completed assay of 558 drums (Gamma Assay), 33 drum (Passive/ Active Neutron [PAN] Assay System), vented 38 TRU drums, and x-rayed 71 drums in the Real-Time-Radiography (RTR) System. Completed field work for TPA milestone: M-091-46A: Certify 850m<sup>3</sup> of small container CH-TRUM on July 21.

#### **Base**

The W&FMP continued maintaining facilities in a safe and compliant condition; Canister Storage Building (CSB) completed quarterly Gaseous Effluent Monitoring System (GEMS) stack flow and mass flow controller functional checks.

The Central Waste Complex (CWC) completed 13 on-site shipments/transfers, 261 containers; and received 60 shipments/transfers, 579 containers.

Liquid Effluent Facilities sent 2.6M gallons of treated effluent to the state-approved land disposal site, continued Basin 43 processing campaign (processed 22.1M gallons), and received Environmental Restoration Disposal Facility (ERDF) leachate (141k gallons) at Liquid Effluent Retention Facility (LERF) Basin 44 (CY 1.1M gallons).

**RL-0030 Soil, Groundwater and Vadose Zone Remediation****ARRA**

Progress through the end of the fiscal month July is summarized in the table below:

Activity	July		Cumulative	
	Planned	Completed	Planned	Completed
Well Drilling (number of wells) -303	0	0	303	303
Well Decommissioning (# of wells) -280	10	11	269	280
100 DX Pump and Treat (P&T) – Construction/Startup (percent)	-	-	100	100
200 West P&T – Final Design (percent)	-	-	100	100
200 West P&T – Construction (percent)	8	7	84	88
200 West P&T – Testing/Startup (percent)	7	9	82	80

**Base**

Base work included pump-and-treat operations, Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial processes, and documentation for the River Corridor and Central Plateau. Sampling and groundwater treatment completed in July includes the following:

- 130 well locations were sampled with a total of 527 samples being collected
- 14 aquifer tube samples collected from 6 tubes at 3 locations
- 17.2M gallons groundwater treated by ZP-1 treatment facility
- 20.7M gallons groundwater treated by KX treatment facility
- 8.8M gallons groundwater treated by KW treatment facility
- 4.7M gallons groundwater treated by KR-4 treatment facility
- 22.4M gallons groundwater treated by DX treatment facility
- 73.9M gallons of groundwater treated total

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

Continued grouting of the 221U Canyon facility voids.

Completed grouting of the process sewer, process cell drain header, and buoyant vessels.

Continued grouting of the process cells.

Completed operating gallery hazardous piping tap and drain.

Started grouting of the south electrical gallery.

Completed installation of temporary lighting, temporary electrical power, and temporary crane power.

Efforts continued in preparation for grouting activities in the remaining areas of the facility (hot pipe trench, south piping gallery, ventilation tunnel and ventilation duct).

Material has been staged and preparations are underway for construction of the structural grout bulkheads for the rail tunnel upon removal of the Cell 30 Tank D-10 process vessel.

Continued preparations for the Cell 30 Tank D-10 process vessel retrieval.

Performed field mock-up activities for vessel retrieval and loading into transportation container.

The 209E facility completed cutting tanks 101 and 105.

Applied fixative to all 200 series slab tanks.

Continued abatement activities in 284W Power House.

Cleanup of 106 North Slope debris pile sites complete; continued decommissioning North Slope wells.

Continued asbestos abatement of the steam lines in the 200W Area.

All the railcars and locomotives have been removed from 212R and relocated to their final disposition location (B Reactor and the Environmental Restoration and Disposal Facility [ERDF]).

Remediation activities continued in the Outer Zone at BC Control area and Model Group (MG)-1 waste sites.

Work was concluded in the BC Control Area with removal of approximately 13,200 tons of soil from the stockpile in July, down posting of the 140 acre Zone A, and sub-contractor demobilization from the site.

### **Base**

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

Continued initial beryllium characterization sampling at B-Plant and 231Z.

Completed initial beryllium characterization at 222T and REDOX.

## **RL-0041 Nuclear Facility D&D, River Corridor**

### **ARRA**

#### **Facilities**

Completed demolition load-out on the 105KE Reactor above-grade demolition of the west annex.

Continued project closeout on the 105KE Reactor Core Removal Project Final Design.

Continued demolition of the 181KW River Pump House/1605KW Guard House.

Continued with demolition of the 183.4KE Clear Well.

Completed asbestos removal in the 190KE Main Pump House and continued with asbestos removal in the 190KW Main Pump Houses and 165KE Power Control Building.

#### **Waste Sites**

All eight borehole samples at the east and west ends of the 105KE reactor building have been completed; sample results are beginning to be received and assessed. The additional direct push technology (DPT) logging activities are planned to be performed in late August.

RL has decided to move forward with a memorandum of agreement (MOA) on the final closure activities for waste site 100-K-63. The MOA was presented to the Tribes in July; final rework of the MOA is on-going with a workshop planned for August 3, 2011. MOA approval is TBD. Once received, CHPRC will be able to move forward with closure of this waste site.

The MOA for the 100K Area flood plain Waste Site 100-K-64 continues to be supported by CHPRC as RL works to finalize the wording contained in this agreement.

Continued waste site remediation of the below listed remove/treat/dispose (RTD) site:

<b>Active Excavation on ARRA Waste Sites and Sub-Grade Structures</b>	<b>July 2011</b>	
	<b>Tons</b>	<b>Containers</b>
100-K-77	2,288	109
<b>Monthly Total</b>	<b>2,288</b>	<b>109</b>
<b>Previous Cumulative (all sites under ARRA)</b>	<b>130,342</b>	<b>7,088</b>
<b>ARRA Cumulative (fiscal year [FY]2009 to Date)</b>	<b>132,630</b>	<b>7,197</b>

### Other

The 100K Electrical Power Project transitioned from the existing A-7 yard to the new A-9 yard/substation. The system is performing as designed.

### Base

#### Facilities

Continued 105KE Reactor engineering/planning activities for the design and construction of the Reactor Building safe storage enclosure (SSE) to place it in interim safe storage (ISS).

Continued blow-grade demolition of the 1706KE Sedimentation Basin.

Continued demolition and electrical work packages for 115KW Gas Recirculation Building.

### Waste Sites

Continued waste site remediation of the below listed RTD sites:

<b>Active Excavation on Base Waste Sites and Sub-Grade Structures</b>	<b>July 2011</b>	
	<b>Tons</b>	<b>Containers</b>
100-K-42	2,252	131
100-K-47	200	9
100-K-53	872	42
105-KE Admin	4,908	245
105-KE West Wall	2,221	113
1706-KE	4,120	198
1706-KER	1,465	71
<b>Monthly Total</b>	<b>16,038</b>	<b>809</b>
<b>Previous Cumulative (all sites under Base)</b>	<b>278,810</b>	<b>13,964</b>
<b>Base Cumulative (FY2009 to Date)</b>	<b>294,848</b>	<b>14,773</b>

## KEY ACCOMPLISHMENTS

Refer to Sections A through G of this report for additional project accomplishments.

### **RL-0011 Nuclear Materials Stabilization and Disposition**

- Revision seven of the PFP D&D Documented Safety Analysis (DSA) and Technical Safety Requirements (TSRs) was transmitted to RL for approval on June 28th.
- Size reduction of Pencil Tank 23 and 24 was completed.
- In Remote Mechanical A Line Room 235B, the cleanout of the large four level glovebox HA-23S continued. The first application of Aspigel chemical decontamination agent was completed for the first level of glovebox HA-23S.
- In RMA Line Room 235A-1, the external isolation of gloveboxes HA-14S, HA-14P, HA-14DC, neared completion while the removal of internal process equipment from HA-14DC and HA-14CC was initiated.
- In RMA Line Room 235A-3 the external isolation and removal of internal process equipment for gloveboxes HA-8A, HA-8B, HA-9C, HA-9D, and HA-9E was started.
- Bulk Area Cleanup activities for the Analytical lab continue.
- The 188-1 glovebox was removed from the facility and turned over to the Solid Waste organization for shipment to PermaFix Northwest (PFNW) for size reduction as TRU waste. This was the last remaining glovebox in the PPSL.
- Process vacuum piping removal is 30 percent complete with 1,210 total feet removed.
- A total of 502 feet of chemical piping transfer line has been removed.
- 201 feet of asbestos-containing materials on piping was removed during the month of July bringing the total to 14,654 feet of asbestos removed to date.
- Electrical services including isolation and air gapping for the 2736Z/ZB Complex and buildings 2721-Z, 2731-ZA and 2736-ZC were completed.
- Completed installation of the Waste Route Platform Extension for Door 107.

### **RL-0012 Spent Nuclear Fuel Stabilization and Disposition**

The CHPRC Annual Office of Civilian Radioactive Waste Management (OCRWM) Audit was completed this month, with the KOP Subproject being the major focus. Strengths were noted in the preparations for using MCO components in storage (Reference Management Assessment of MCO Components Material Storage) and the knowledge of the Buyers Technical Representative for the MCO Copper Insert Contract. Overall the subproject did well and is in good shape for the DOE-HQ OCRWM Audit planned for September 2011.

The Phase 2 Technology Evaluation and Alternatives Analysis Recommendation Report (PRC-STP-00465) was approved and in the release process. The formal transmittal of this document to RL is being routed for approval. This represents the completion of a 22-month effort to identify, demonstrate feasibility, and evaluate technologies that could be used to treat and package the K Basin sludge material for disposal as RH-TRU. Issuance of this report (expected by the end of the calendar month) will fulfill the requirements for PI-12-02.2R.4, "Submittal of Phase 2 Technology Recommendation report to RL".

## RL-0013 Waste and Fuels Management Project

### ARRA

- MLLW: M-91-42/435.1– shipped 48 m<sup>3</sup> to processing and completed 31 m<sup>3</sup>
- Removed 147.8 m<sup>3</sup> of CH-TRU waste from the trenches
- Shipped 215.6 m<sup>3</sup> of retrievably stored CH-TRU waste
- Next Generation Retrieval (NGR) removed 271 drums and 22 boxes (62.4 m<sup>3</sup>)
- Completed the KPP to ship 1,800 m<sup>3</sup> Legacy M/LLW to a treatment facility
- Completed the field work for Tri-Party Agreement (TPA) milestone M-091-46A, Certify 850m<sup>3</sup> of small container CH-TRUM on July 21
- Supported Waste Retrieval Project (WRP) Point-of-Generation TRUM Repackaging (200 m<sup>3</sup>): Shipped 205 m<sup>3</sup> from LLBG 3A to PFNW for repackaging (113 m<sup>3</sup> total completed to date).

### Base

- The CWC completed 13 on-site shipments/transfers, 261 containers; and received 60 shipments/transfers, 579 containers.
- Liquid Effluent Facilities sent 22.1M gallons of treated effluent to the state-approved land disposal site and continued with Basin 43 Processing Campaign (processed 22.1M gallons).

## RL-0030 Soil and Groundwater Remediation

### ARRA

Activity	July		Cumulative	
	Planned	Completed	Planned	Completed
Well Drilling (number of wells)	0	0	303	303
Well Decommissioning (# of wells)	10	11	269	280
100 DX Pump and Treat (P&T) – Construction/Startup (percent)	-	-	100	100
200 West P&T – Final Design (percent)	-	-	100	100
200 West P&T – Construction (percent)	8	7	84	88
200 West P&T – Testing/Startup (percent)	7	9	82	80

### Base

- 73.9M gallons of groundwater treated total

### EPC Projects in Support of S&GRP - ARRA

- 200 West Area Groundwater Treatment Facility –KPP scope is 91% complete, with approximately 200 craft working to keep the installation of mechanical, electrical and process controls on schedule. Continued on schedule execution of 29 Construction Acceptance Tests (CAT): Two completed CATs with 18 Active CATs.

### EPC Projects in Support of S&GRP – Base

- 100-HX Groundwater Treatment Facility – Equipment installation in the Treatment and Transfer Buildings is complete. The Construction Acceptance Tests (CATs) are 88% complete. All transfer lines, injection well lines, and 20 of 21 extraction well lines have been flushed and leak tested. The final draft of the Acceptance Test Procedure (ATP) has been routed for final comments and approvals.

**Environmental Strategic Planning:**

- Finalized the Central Plateau bioassay data analysis. Calc brief preparation is underway.
- Issued Revision 2 of the Quality Assurance Project Plan (QAPP) for Modeling and submitted to EQA for inclusion in the CH2M HILL Plateau Remediation Company Environmental Quality Assurance Program Plan.
- Evaluating model alternatives in support of the ERDF PA.
- Provided the Central Plateau Ecological Risk Assessment Data Package Report, DOE/RL-2007-50, Revision 1 to DOE-RL.
- Provided the report on the Tier 1 Risk-Based Soil Concentrations Protective of Ecological Receptors at the Hanford Site to DOE-RL.

**100-NR-2 Operable Unit - Base**

- RI/FS well drilling and sampling activities initiated at well C8189 and resumed at well C8188. Drilling and sampling of wells C8184 and C8191 were completed and well construction initiated at C8184. Overall, drilling and sampling has been completed at 4 of the 8 RI/FS wells.
- All other RI/FS field work is complete.

**100-HR-3 Operable Unit - Base**

- Efforts to place the DR-5 into cold standby were completed.

**100-FR-3 Operable Unit - Base**

- Internal review comments on the RI/FS report continued to be incorporated into the decisional draft scheduled for RL review starting in mid August. Resolution to comments on the decisional draft RI/FS for KR-4 are being reviewed for applicability and incorporated into the 100-F and IU-2/6 RI/FS report where appropriate.
- **Deep Vadose Zone - Base**
- Completed the Data Quality Objective (DQO) scoping session for the S Area waste sites with Ecology on July 18, 2011.

**RL-0040 Nuclear Facility D&D, Remainder of Hanford****ARRA – U Plant/Other D&D**

- U Canyon Demolition and Cell 30 Disposition
  - Continued grouting of the 221U Canyon facility voids and process cells. Completed grouting of the process sewer, process cell drain header, and buoyant vessels. Completed operating gallery hazardous piping tap and drain. Started grouting of the south electrical gallery. Completed installation of temporary lighting, temporary electrical power, and temporary crane power. Efforts continued in preparation for grouting activities in the remaining areas of the facility (hot pipe trench, south piping gallery, ventilation tunnel, and ventilation duct).
  - Continued preparations for the Cell Tank D-10 process vessel retrieval. Performed field mock-up activities for vessel retrieval and loading into transportation container.

**ARRA – OUTER ZONE D&D**

- BC Controlled Area (BCCA) Waste Site Remediation
  - Conclusion of soil removal from the stockpile using super dump trucks with approximately 483,000 tons cumulative-to-date of soil removed from BCCA and transferred to ERDF
  - Conclusion of radiological Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) downpost surveys and localized spot removal. 100% of Zone A has been MARSSIM surveyed and downposted.

**RL-0041 Nuclear Facility D&D, River Corridor****ARRA****Facilities**

- Work was completed on the 105KE Reactor Building Disposition Site Preparation/Phase I Demolition – ISS above-grade demolition of the West Annex.
- Project closeout continued on the 105KE Reactor Core Removal Final design.
- 110KW Gas Storage Facility demolition is complete. Load out is continuing.
- Continued demolition of the 181KW River Pump House. The 165KE Power Control Building demolition planning continued; asbestos removal activities continued.
- Completed deactivation of the 183.1KE Head House. Completed asbestos removal and above-grade demolition. Completed demolition of below-grade which was self-performed. Load out is continuing.
- Continue demolition on above-grade for the 183.3KE Filter Basin and load out. Initiated sampling plans to verify the 183.4KW/183.4KE Clear Well floors can remain in place.
- Continued with asbestos removal in 190KW as well as the demolition work plan.

**Base****Waste Sites**

- Waste sites 120-KW-1, 100-K-109, 100-K-102 are ready for closure.

## MAJOR ISSUES

### **RL-0011 Nuclear Materials Stabilization and Disposition**

**Issue** – On Sunday, July 24, 2011, the trolley on the PRF canyon crane failed during movement to retrieve the counter balance to install the Tank 23 strongback. A loud noise was heard from inside the canyon when the crane motion switch was moved to either the east or west directions.

**Corrective Actions** – Troubleshooting activities were initiated and corrective actions will be identified.

### **RL-0012 Spent Nuclear Fuel Stabilization and Disposition**

No major issues to report this month.

### **RL-0013 Waste and Fuels Management Project**

No major issues to report this month.

### **RL-0030 Soil and Groundwater Remediation**

No major issues to report this month.

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

No major issues to report this month.

### **RL-0041 Nuclear Facility D&D, River Corridor**

**Issue** – RL-41 Waste Site Remediation will probably not be able to complete the remediation work scope tied to waste site 100-K-57 by December 31, 2012. The inability to complete this work by December 31, 2012, is being driven by the lack of an approved cultural resources mitigation action plan.

**Corrective Action** – Move this waste site from TPA Phase 1 to TPA Phase 3.

**Status** – CHPRC has drafted a TPA change package for RL to present to EPA for approval that will move this waste site from TPA Phase 1 to TPA Phase 3.

### **RL-0042 Fast Flux Test Facility Closure**

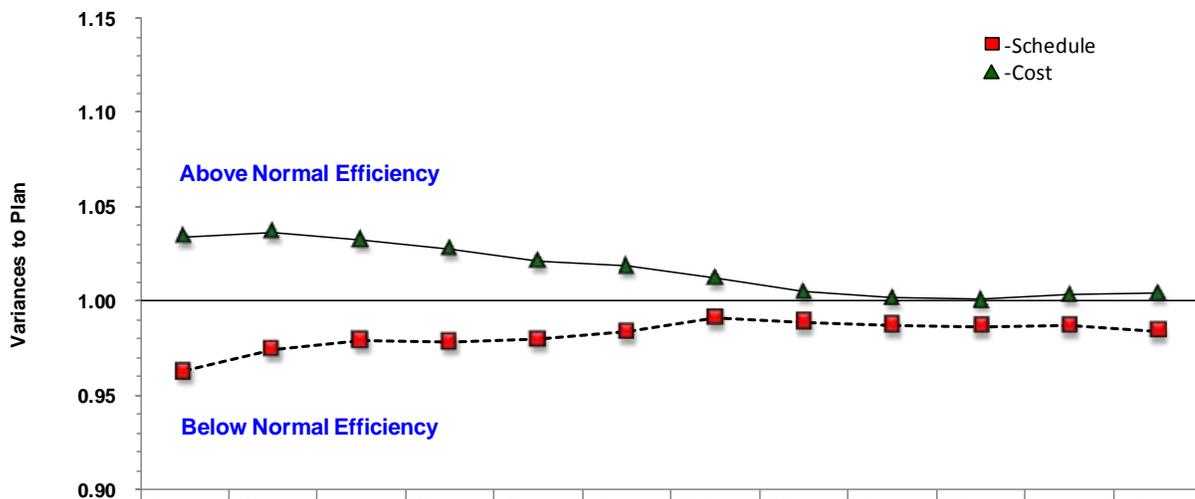
**Issue** – Roof leaks have developed that require repairs beyond normal patches.

**Corrective Action** – Allocation of funds through the BCR process has been approved to pursue needed major repairs for the roofs.

**Status** – The contract has been awarded and repairs will begin in August.

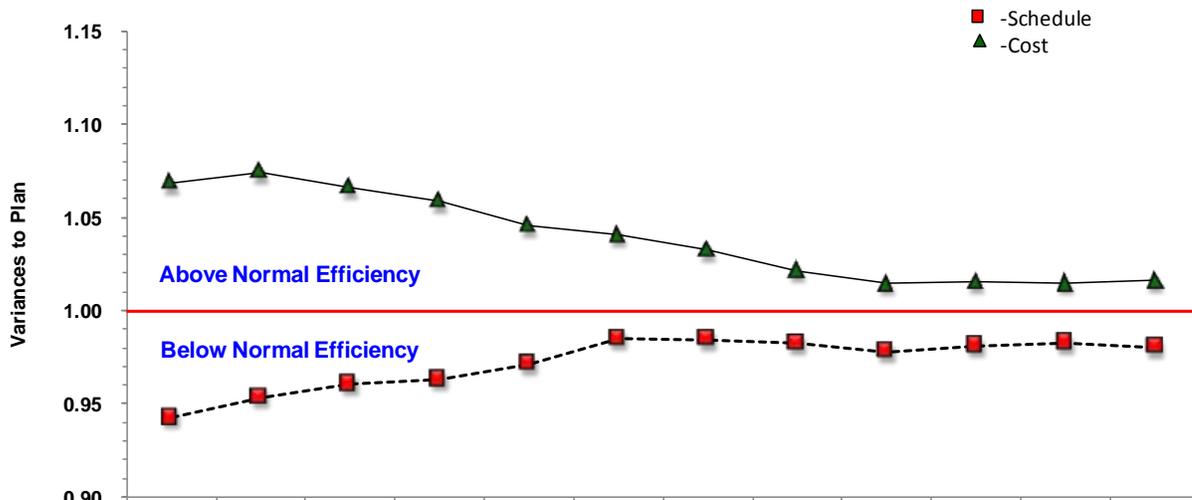
## EARNED VALUE MANAGEMENT

### Schedule and Cost Performance - ARRA and Base (Rolling 12 Month View)



	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11
MONTHLY SPI	0.92	1.13	1.10	0.96	1.02	1.09	1.25	0.94	0.95	0.98	0.99	0.91
MONTHLY CPI	0.83	1.07	0.93	0.94	0.89	0.96	0.87	0.88	0.94	0.98	1.07	1.03
--■-- CTD SPI	0.96	0.97	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.98
—▲— CTD CPI	1.03	1.04	1.03	1.03	1.02	1.02	1.01	1.00	1.00	1.00	1.00	1.00

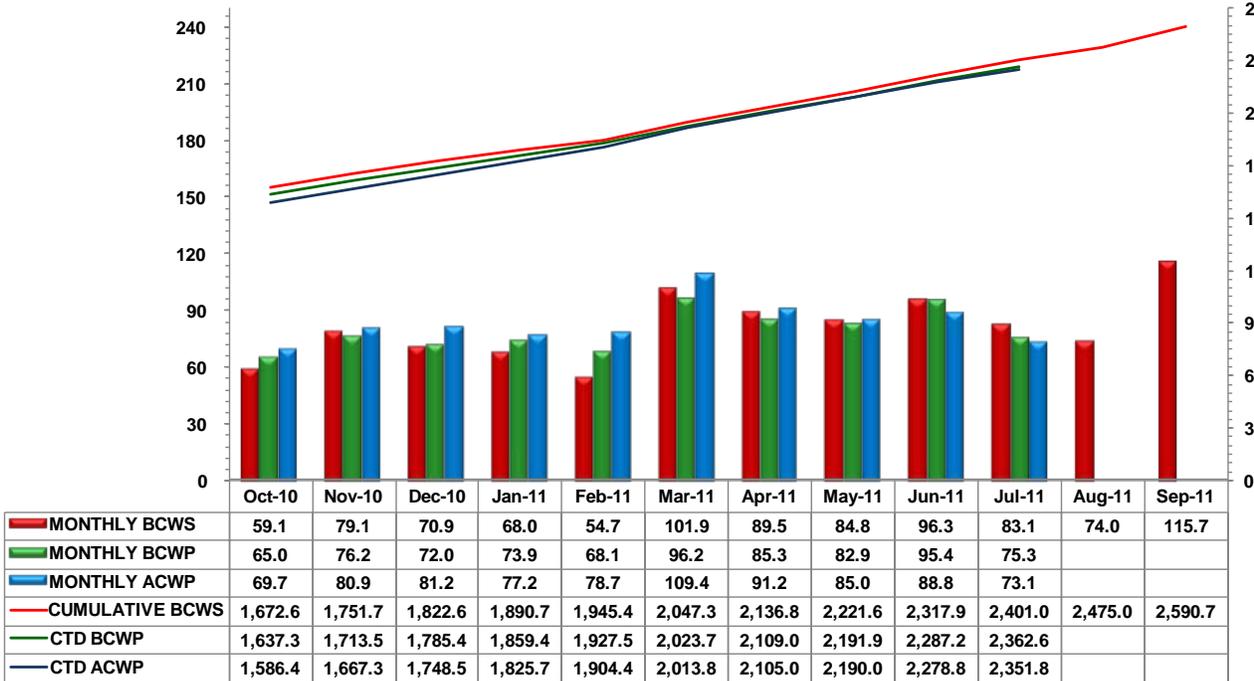
### Schedule and Cost Performance - ARRA (Rolling 12 Month View)



	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11
MONTHLY SPI	0.83	1.06	1.11	1.01	1.17	1.31	0.98	0.95	0.90	1.04	1.01	0.93
MONTHLY CPI	0.80	1.13	0.93	0.94	0.84	0.96	0.90	0.87	0.90	1.03	1.01	1.04
--■-- CTD SPI	0.94	0.95	0.96	0.96	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.98
—▲— CTD CPI	1.07	1.07	1.07	1.06	1.05	1.04	1.03	1.02	1.01	1.02	1.02	1.02

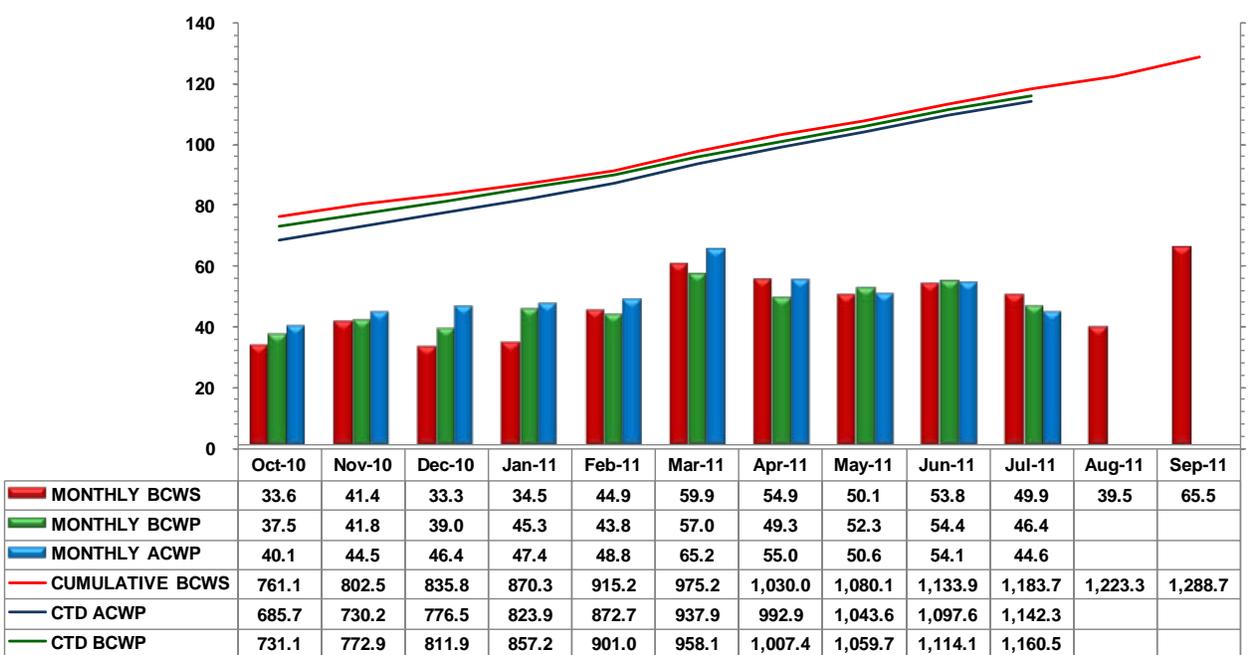
### Schedule and Cost Performance - ARRA and Base

Bars: Current Month (\$M) Lines: Contract To Date (\$M)



### Schedule and Cost Performance - ARRA

Bars: Current Month (\$M) Lines: Contract To Date (\$M)



## Performance Analysis – July

## ARRA Performance by PBS

	\$M				
	Current Period				
	Budgeted Cost		Actual Cost	Variance	
	BCWS	BCWP	ACWP	Schedule	Cost
RL-0011 - PFP D&D	11.8	8.5	9.7	(3.3)	(1.2)
RL-0013 - MLLW Treatment	1.3	1.4	0.8	0.1	0.6
RL-0013 - TRU Waste	11.5	10.9	10.3	(0.5)	0.6
RL-0030 - GW Capital Asset	8.9	8.3	6.4	(0.6)	1.9
RL-0030 - GW Operations	4.2	4.4	4.4	0.2	(0.1)
RL-0040 - U Plant/Other D&D	6.0	6.2	6.7	0.2	(0.4)
RL-0040 - Outer Zone D&D	2.4	3.8	2.7	1.5	1.2
RL-0041 - 100K Area Remediation	3.8	2.8	3.6	(1.0)	(0.8)
<b>Total</b>	<b>49.9</b>	<b>46.4</b>	<b>44.6</b>	<b>(3.5)</b>	<b>1.8</b>

## ARRA

The Current Month favorable Schedule Variance: (-\$3.5M/-7.0%) reflects:

- The RL-0011 negative variance (-\$3.3M) is due to the following:
  - The negative variance is primarily a result of delays in completing D&D of 234-5Z, deferred D&D work resulting from resources reassigned to focus on higher priority KPP glovebox removal work scope and preparing the 2736-Z/ZB complex for demolition. The 234-5Z process and lab area D&D delays are a result of inability to staff the planned three shifts of overtime, shortage of critical (Millwright) resources impacting critical path work, more stringent radiological controls, and longer duration due to difficulty in laboratory bulk area cleanout.
- The RL-0013 negative variance (-\$0.4M) reflects the following subproject performance:
  - RL-0013 MLLW Treatment (+\$0.1M) The positive variance is due to schedule recovery for M-91-43 waste, performance taken on prior period Large Type A waste container shipments to PermaFix Northwest (PFNW); partially offset by 435.1 waste processing achieved in prior period and delay in M-91-42 feed from TRU Retrieval.
  - RL-0013 TRU Waste (-\$0.5M) The negative variance is due to suspension of RH/Large Package Commercial Repack to align with FY2011 priorities; partially offset by TRU Retrieval accelerated Point of Generation (POG) commercial processing.
- The RL-0030 negative variance (-\$0.4M) that exceed the reporting thresholds reflect the following subproject performance:
  - ARRA RL-0030.R1.1 GW Capital Asset (-\$0.6M) The negative variance is due to 200W Pump-And-Treat construction is performing ahead of the baseline schedule and the result of previously completed work with BCWS being realized.

- ARRA RL-0030-R.1.2 GW Operations (+\$0.2M) The positive variance is within reporting thresholds.
- Primary contributors to the RL-0040 positive variance (+\$1.7M) is within reporting thresholds, reflected upon the following subproject performance:
  - ARRA RL-0040.R1.1 U Plant/Other D&D (+\$0.2M) The positive variance is within reporting thresholds.
  - ARRA RL-0040.R1.2 Outer Zone D&D (+\$1.5M) The positive variance is due to gains in waste sites due to pre-staging backfill material at 216-S-19 and 216-S-26 waste sites.
- The RL-0041 negative variance (-\$1.0M) is due to the following:
  - Waste Sites (+\$0.0M) The positive variance is within reporting thresholds.
  - 100K Area Project (Facilities and Others) (-\$1.0M) The negative variance is due to the delays encountered earlier in the year related to the Utilities Upgrades which has impacted demolition of facilities. There will be no additional CENRTC purchases made this year and the treatment of the large diameter container (LDC) at T Plant will not occur in FY2011.

The Current Month favorable Cost Variance (+\$1.8M/+3.8%) reflects:

- The RL-0011 negative variance (-\$1.2M) is due to the following:
  - The current month negative cost variance is primarily a result of higher cost to execute the D&D 234-5Z work scope as a result of delays, difficulty and encountered inefficiencies. Higher cost has also resulted from additional resources required to bring the Z/ZB complex to a Cold and Dark status and higher use of MSA brokered craft to support D&D.
- The primary contributors to the RL-0013 positive variance (+\$1.2M) is due to the following subproject performance:
  - RL-0013 MLLW Treatment (+\$0.6M) The positive variance is due to schedule recovery for M-91-43 without commensurate costs, coupled with delay in receipt of costs for M-91-42 completions.
  - RL-0013 TRU Waste (+\$0.6M) The positive variance is due to TRU Retrieval schedule recovery without commensurate costs, efficiencies in TRU Characterization and Shipping; partially offset by late receipt of subcontractor costs for RH/Large Package Commercial Repack.
- The RL-0030 positive variance (+\$1.8M) that exceed the reporting thresholds reflect the following subproject performance:
  - ARRA RL-0030.R1.1 GW Capital Asset (+\$1.9M)
    - 200-ZP-1 OU positive variance (+\$1.9M) is due to 200W P&T construction having efficiencies experienced with project support resources, installation of well rack instrumentation and procurement of fiber optic/electrical cable and transfer of costs for work scope moved to R1.2.
  - ARRA RL-0030-R.1.2 GW Operations negative variance (-\$0.1M) is within reporting thresholds.

- The RL-0040 positive variance (+\$0.8M) that reflects the following subproject performance:
  - ARRA RL-0040.R1.1 U Plant/Other D&D (-\$0.4M) The negative variance is within reporting thresholds.
  - ARRA RL-0040.R1.2 Outer Zone D&D (+\$1.2M) The positive variance is primarily due to contract costs for disposal of railcars (+\$1.5M) coming in less than estimated for the month. This is offset by an unfavorable cost variance in waste sites (-\$0.1M) related to extent of contamination in 216-S-9 and 216-S-26. Minor accounts outside threshold (-\$0.2M).
- The RL-0041 negative variance (-\$0.8M) is due to the following:
  - Waste Sites (+\$0.1M) The positive variance is within reporting threshold.
  - 100K Area Project Facilities and Others (-\$0.9M) The negative variance is primarily due to the K West Basin Debris Project collecting costs without performance; until the One-Time Request for Shipment (OTRS) is completed and the IP-2 shipped, no performance can be obtained.

### Base Performance by PBS

	\$M				
	Current Period				
	Budgeted Cost		Actual Cost	Variance	
	BCWS	BCWP	ACWP	Schedule	Cost
RL-0011 - Nuclear Materials Stab & Disp PFP	2.4	2.2	2.8	(0.2)	(0.6)
RL-0012 - SNF Stabilization & Disposition	5.9	6.0	5.6	0.0	0.4
RL-0013 - Solid Waste Stab & Disposition	5.7	5.4	6.0	(0.3)	(0.6)
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	12.4	10.7	10.1	(1.6)	0.6
RL-0040 - Nuc Fac D&D - Remainder	1.4	1.2	1.0	(0.2)	0.2
RL-0041 - Nuc Fac D&D - RC Closure Project	5.3	3.4	2.9	(1.9)	0.5
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.1	0.1	(0.1)	0.0
<b>Total</b>	<b>33.3</b>	<b>29.0</b>	<b>28.5</b>	<b>(4.3)</b>	<b>0.5</b>

#### Base

The Current Month unfavorable Schedule Variance (-\$4.3M/-12.9%) reflects:

- The RL-0011 negative variance (-\$0.2M) is within reporting thresholds.
- The RL-0012 positive variance (+\$0.0M) combined STP and 100K schedule variances are within thresholds.
- The RL-0013 negative variance (-\$0.3M) is primarily due to:
  - Suspension of WESF K1/K3 is within reporting thresholds. The negative variance is due to suspension of K1/K3 ventilation upgrades.

- The RL-0030 negative variance (-\$1.6M) The primary contributors that exceed the reporting thresholds are as follows:
  - Drilling (-\$0.5M) The negative variance is due to CHPRC site wide Lock Out/ Tag Out stop work delayed current drilling programs. Crews have had to drill deeper due to sample results that showed a high concentration of Tc-99. Also, ZP-1 did not make the planned drilling production rates. The project de-scoped wells due to schedule slippage from the first subcontractor and rebid three wells and awarded to a second contractor. The six well ZP-1 and the third extraction well for UP-1 will be carried over into FY2012 and have been included in the FY2012 planning.
  - 100HR-3 Operable Unit (-\$1.0M) The negative variance is due to 100HX P&T construction has performed work ahead of schedule, the negative variance is the result of realizing BCWS in the CM for work completed in previous periods.
  - 200-ZP-1 Operable Unit (+\$0.4M) The positive variance is primarily associated with completing S-SX construction activities in July that the BCWS was planned in prior months. No significant variance exists for the Contract-S-SX project.
  - 200W P&T (-\$0.6M) The negative variance is due to delays associated with sludge stabilization subcontractor submittals, fair cost estimates, award of contract and delayed procurements.
- The RL-0040 negative variance (-\$0.2M) is within reporting thresholds.
- The RL-0041 positive variance (+\$1.9M) is due the following:
  - Waste Sites (-\$2.0M) The negative schedule variance is primarily due to high levels of contamination at 100-K-42 which have forced a strategic pause and re-evaluation of the path forward for waste sites in the 105KE fuel storage basin, encountering less contamination than expected at the 105KW head house Area AA thus ending excavation early, and cultural resource issues which continue to delay work in the 100-K-64 flood plain.
  - 100K Area Project Facilities and Others (+\$0.1M) The positive variance is within reporting threshold.
- The RL-0042 negative variance (-\$0.1M) is within reporting thresholds.

The Current Month favorable Cost Variance (+\$0.5M/+1.8%) reflects:

- The RL-0011 negative variance (-\$0.6M) is primarily due to:
  - Surveillance/monitoring and maintenance of vital systems required to support D&D, which were planned to be deactivated earlier in the Fiscal Year. In addition, four HPTs (one per shift) have been added to support MinSafe Operations A/B/C/D shifts.
- The RL-0012 positive variance (+\$0.4M) Combined STP and 100K variance is within thresholds.
- The RL-0013 negative variance (-\$0.6M) is due to Increased assessments above plan, Kelly Klosure materials received but not installed, increased resources required for support of Transportation and Packaging activities.
- The RL-0030 positive variance (+\$0.6M) The primary contributors that exceed the reporting thresholds are as follows:

- Integration and Assessments (+\$0.4M) The positive variance results from less support required to Central Plateau Strategy development due to changes in requirements. This positive variance will continue through FY2011.
- Drilling (-\$0.3M) Encountered Radiological contamination on two NR-2 wells and now expect to see it on the other two wells. Due to contamination issues, a full time health physics technician is required and additional well drilling rigs are being used to recover the variance. This has resulted in additional cost and the current month overrun.
- 100 HR-3 Operable Unit (-\$0.3M) The negative variance is the result of CAT activities requiring more resources than budgeted, based on experience with 100DX and this project that budgeted resources for CATs were not sufficient to complete the work scope.
- The RL-0040 negative variance (-\$0.1M) is within reporting thresholds.
- The RL-0041 positive variance (+\$0.5M) is primarily due to the following:
  - Waste Sites (+\$0.0M) The negative variance is within reporting thresholds.
  - 100K Area Project Facilities and Others (+\$0.5M) The positive variance is within reporting thresholds.
- The RL-0042 positive variance (+\$0.0M) is within reporting thresholds.

## Performance Analysis – Contract to Date

## ARRA Performance by PBS

	\$M				
	Contract to Date				
	Budgeted Cost		Actual Cost	Variance	
	BCWS	BCWP	ACWP	Schedule	Cost
RL-0011 - PFP D&D	246.1	236.4	240.7	(9.8)	(4.4)
RL-0013 - MLLW Treatment	44.3	41.7	37.6	(2.6)	4.1
RL-0013 - TRU Waste	218.6	215.6	217.7	(3.1)	(2.2)
RL-0030 - GW Capital Asset	157.4	162.3	164.4	4.9	(2.1)
RL-0030 - GW Operations	82.3	83.2	79.4	0.9	3.8
RL-0040 - U Plant/Other D&D	183.0	177.7	169.3	(5.3)	8.4
RL-0040 - Outer Zone D&D	84.8	82.3	69.9	(2.5)	12.4
RL-0041 - 100K Area Remediation	167.2	161.4	163.1	(5.8)	(1.7)
<b>Total</b>	<b>1,183.7</b>	<b>1,160.5</b>	<b>1,142.3</b>	<b>(23.2)</b>	<b>18.2</b>

## ARRA

The CTD unfavorable Schedule Variance (-\$23.2M/-2.0%) reflects:

- The RL-0011 negative variance (-\$9.8M) is within reporting thresholds.
- The RL-0013 negative variance (-\$5.7M) is due to the following subprojects:
  - RL-0013 MLLW Treatment (-\$2.6M) Delay in receipt of M-91-42 feed from TRU Retrieval, coupled with delay of M-91-43 returns (receiving facility processing higher priority waste), partially offset by accelerated shipments of 435.1 waste.
  - RL-0013 TRU Waste (-\$3.1M) T-Plant Repack impacted by need to vent drums with 90 mil liners, coupled with suspension of RH/Large Package Commercial Repack to align with FY2011 priorities, and delayed WRAP Repack due to Beryllium (Be) program impacts and 2404WB recovery activities, delay in TRUPACT II shipments awaiting CCP certification letter and equipment issues; partially offset by TRU Retrieval accelerated Point of Generation (POG) commercial processing.
- The RL-0030 positive variance (+\$5.8M) is due to the following subproject performance:
  - RL-0030.R1.1 GW Capital Asset (+\$4.9M) The positive variance is the result of managing the 200 W ZP-1 Operable unit primary contractor to an accelerated completion date.
  - RL-0030.R1.2 GW Operations (+\$0.9M) The positive variance is due to the 200 W ZP-1 Operable unit's early completion of business information modeling and early start on installation of heat trace.
- The RL-0040 CTD negative variance (-\$7.8M) primary contributors that exceed the reporting thresholds are as follows:

- RL-0040.R1.1 U Plant/Other D&D (-\$5.3M) negative schedule variance is due to the late award of the grout contract for U Canyon (-\$2.7M), delays with the hazard reduction of 209E (-\$0.9M), and limited resources have also delayed 200W Administration Buildings (-\$1.6M). Also minor accounts outside the threshold (-\$0.1M).
- RL-0040.R1.2 Outer Zone D&D (-\$2.5M) Negative variance is primarily due to the waste sites in ARRA that need to be moved to base to support the priority of footprint reduction (-\$2.9M), which is offset by the ahead of schedule disposition of the 212N Railcars (+\$0.5M), and minor accounts outside the threshold (+\$0.1M).
- The RL-0041 negative variance (-\$5.8M) is primarily due to the 100K Area Project had delays with the Utilities Project earlier in the fiscal year. This delayed the completion of demolition of several facilities. In addition, An Emergency Decontamination trailer (CENRTC) will not be purchased until FY2014; the treatment of the LDC currently being stored at T Plant will be deferred to the out years.

The CTD favorable cost variance (+\$18.2M/+1.6%) reflects:

- The RL-0011 negative variance (-\$4.4M) is within reporting thresholds.
- The RL-0013 positive variance (+\$1.9M) reflects the following subproject performance:
  - RL-0013 TRU Waste (-\$2.2M) Increased materials and labor costs in support of the Trench Face Retrieval and Characterization system (TFRCS), coupled with increased resources for TRU Retrieval deteriorated waste containers, increased allocations for additional office space and other assessments as a result of increased Recovery Act expenditures; partially offset by efficiencies in TRU Characterization and Shipping, T-Plant, WRAP and TRU Repackaging.
  - RL-0013 MLLW Treatment (+\$4.1M) Mixed Low Level Waste costs below plan due to efficiencies created by treating waste at Energy Solutions (ES) - Clive rather than planned treatment at PermaFix Northwest (PFNW) due to a waiver received from the Department of Energy (DOE), ERDF negotiated rate reduction with vendor for waste containers, decreased operations costs at Low Level Burial Grounds (LLBG), efficiencies in Large Type A waste container shipments to PFNW and in Mixed Waste Disposal Trenches (MWDT) upgrades, partially offset by higher costs for ETF Containment Berm repairs.
- The RL-0030 positive variance (+\$1.6M) reflects the following subproject performance:
  - RL-0030.R1.1 GW Capital Asset negative variance (-\$2.1M) can be attributed to the following:
    - 200-ZP-1 Operable Unit (-\$2.9M) modifications in design of Long Lead Equipment (LLE) procurements.
    - 100-HR-3 Operable Unit (-\$0.8M) result of increased installation costs on the pH adjustment system, the impacts of weather on completing construction punch-list items, and the Acceptance Test Plan for the facility/process.
  - RL-0030.R1.2 GW Operations positive variance (+\$3.8M) can be attributed to the following:
    - Drilling (+\$2.3M) efficiencies and savings obtained in drilling for 100-NR-2 and 200-BP-5 wells. Cost efficiencies have been obtained through an aggressive drilling schedule with savings in support personnel and faster drilling methods. Well decommissionings have also been completed for less than planned.
    - Regulatory Decision and Closure Integration (+\$1.7M) The positive variance is due to completing work scope more efficiently than planned, primarily in the areas of multi-incremental sampling (using existing documentation and direct haul rather than staging) and

borehole drilling and landfill characterization (competitive subcontracting of drilling support and efficient field support).

- Ramp-up & Transition – The negative variance was driven by increased Project Services Distribution to RL-0030.
- PBS RL-0030 Overhead (+\$0.8M) The positive cost variance is discussed in Appendix C.
- The RL-0040 positive variance (+\$20.9M) reflects the following subproject performance:
  - ARRA RL-0040.R1.1 U Plant/Other D&D (+\$8.5M) positive variance is largely due to favorable performance of the Cold and Dark teams and the Sampling and Characterization/Waste Identification Form teams (D4) (+\$3.9M), overhead allocations (+\$11.2M), less for Program Management than planned (+\$2.0M), less resources than planned for C-3 Sampling (+\$0.7M), lower than planned costs for capital equipment (D4) (+\$2.7M), less asbestos abatement required for 200W buildings (+\$3.4M), offset by increased material and equipment costs, increased use of masks and respirators due to the unexpected asbestos levels in the ancillary buildings in U Ancillary (D4) (-\$8.0M), coupled with increased insulator staff and overtime to recover schedule, 200E Administration (-\$1.2M) and 209E Project delays (-\$2.4M), additional resources being applied at U Canyon (D4) to regain schedule (-\$1.3M), Usage Based Services (-\$2.7M), and minor accounts not within threshold (+\$2.0M).
  - ARRA RL-0040.R1.2 Outer Zone D&D (+\$12.4M) favorable variance is due to efficiencies in Arid Lands Ecology (ALE), North Slope Facilities, disposition of railcars D&D (+\$7.2M), and Outer Area waste sites (+\$6.3M). The waste site favorable variance is primarily due to an O Zone Remote, Treat, and Dispose (RTD) Waste Sites adjustment (pass back) to ERDF waste disposal costs reflecting the operational efficiencies of the super dump trucks. Within the waste sites area, this favorable cost variance is partially offset by higher than planned costs associated with remediation of pipelines. A negative variance is associated with increased costs for the 212N/P/R Project (-\$1.1M) due to the walls of the basins being much thicker than estimated.
- The RL-0041 negative variance (-\$1.7M) is due to the following:
  - Waste Sites (+\$7.6M) – The positive cost variance is due to CSNA sites that were completed at less than anticipated cost. This is partially offset by greater than anticipated extent and severity of contamination on many waste sites resulting in more tons disposed and more controls required, thus higher than anticipated cost.
- 100K Area Project (-\$9.3M) – The negative cost variance is due to numerous design changes and additional punch list items in the Utilities Reroute project; the project has been utilizing more vehicles and equipment than was planned and Project Management continues to overrun due to increase charges for labor and materials.

## Base Performance by PBS

	\$M				
	Contract to Date				
	Budgeted Cost		Actual Cost	Variance	
	BCWS	BCWP	ACWP	Schedule	Cost
RL-0011 - Nuclear Materials Stab & Disp PFP	150.3	149.2	150.7	(1.1)	(1.5)
RL-0012 - SNF Stabilization & Disposition	237.8	233.1	236.4	(4.7)	(3.3)
RL-0013 - Solid Waste Stab & Disposition	298.4	295.8	305.3	(2.6)	(9.6)
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	387.6	384.7	388.2	(2.8)	(3.4)
RL-0040 - Nuc Fac D&D - Remainder	63.5	63.5	56.5	0.0	7.0
RL-0041 - Nuc Fac D&D - RC Closure Project	68.2	64.3	62.2	(3.8)	2.2
RL-0042 - Nuc Fac D&D - FFTF Project	11.5	11.4	10.3	(0.1)	1.1
<b>Total</b>	<b>1,217.3</b>	<b>1,202.1</b>	<b>1,209.6</b>	<b>(15.2)</b>	<b>(7.5)</b>

### Base

The CTD unfavorable Schedule Variance (-\$15.2M/-1.2%) reflects:

- The RL-0011 negative variance (-\$1.0M) is within reporting thresholds.
- The RL-0012 negative variance (-\$4.8M) the combined 100K and STP variances are within reporting thresholds.
- The RL-0013 negative variance (-\$2.6M) is due to:
  - Delayed start to WESF K1/K3 Upgrades/Definitive Design pending decision to move forward with final design. Canister Storage Building (CSB) engineering activities delayed due to resource availability (assigned to higher priority activities), ETF Thin Film Dryer Vessel replacement suspended until required (unit failure); partially offset by accelerated WRAP HEPA filter replacement (scheduled for FY13).
- The RL-0030 negative variance (-\$2.8M) is primarily due to:
  - Drilling (-\$1.7M) ZP-1 Well Drilling activities due to a broken 16" casing, shipment delays in receiving the under reamer tool for the 12" casing, and nesting of a protected bird species in the mast of one of the rigs. UP-1 planning process also took longer than planned. It is anticipated that some of the ZP-1 drilling will slip into FY2012.
  - 100-HR-3 Operable Unit (+\$1.6M) HX construction activities for Procure/Install Equipment, Distribution of Electricity and Piping and Transfer Building Construction are being performed ahead of schedule to support the completion of construction activities and acceptance testing by September 2011. The project is currently forecast to complete ahead of baseline schedule.
- The RL-0040 positive variance (+\$0.0M) is within reporting thresholds.
- The RL-0041 negative variance (-\$3.8M) within Waste Sites and 100K Area Project are within reporting thresholds.
- The RL-0042 positive variance (-\$0.1M) is within reporting thresholds.

The CTD unfavorable Cost Variance (-\$7.5M/-0.6%) reflects:

- The RL-0011 negative variance (-\$1.5M) is within reporting thresholds.
- The RL-0012 negative variance (-\$3.3M) The combined 100K and STP variances are within reporting thresholds.
- The RL-0013 negative variance (-\$9.6M) is due to:
  - Increased assessments above plan, TRU Retrieval additional resources to deal with deteriorated containers and drum wedge issue, FY2009 WRAP facility increased levels of corrective and preventive maintenance activities as a result of repack operations, increased labor and subcontractor support for Transportation and Packaging; partially offset by efficiencies in LEF, MLLW, TRU Disposition, TRU Repackaging, Interim Storage Area upgrades, Capsule Storage and Disposition, Mixed Waste Disposal Trenches (MWDT) and lower General & Administrative allocations.
- The RL-0030 negative variance (-\$3.4M) primary contributors that exceed the reporting thresholds are as follows:
  - Integration & Assessments (+\$3.6M) Primary drivers for this positive variance is due to less subcontractor support required for Central Plateau strategy development and integration. Sample Management and Reporting has performed work scope more efficiently than planned. Less cleanup document reviews were required than originally planned, requiring less contract support. Efficiencies/savings were realized in establishing document templates, reviewing procedures and software procurements.
  - 100-NR-2 OU (+\$1.6M) Chemical treatment and maintenance scope, jet grouting pilot test work, RI/FS Work Plan and Interim Proposed Plan Reporting were performed more efficiently than planned leading to the positive cost variance.
  - 100-HR-3 Operable Unit (-\$2.8M) Primary contributors to the negative cost variance are as follows:
    - 100DX - extensive effort required to design the pH adjustment system, cost overruns in completing the OU Remedial Process Optimization studies.
    - 100DX unplanned modifications on the system after completion of construction and higher than expected cost to complete acceptance test plan and the operational test plan
    - Cost of realigning wells from DR-5 to 100DX
    - 100HX Construction cable cost increased due to increases in copper prices
    - Additional time and resources being spent on internal CERCLA (RI/FS) document development that will be recovered in completed Draft A document
  - 200-ZP-1 Operable Unit (+\$3.5M) Major contributors to the variance are as follows:
    - Interim Operations reflects significant progress and cost underruns achieved to date for System Calibration
    - Design of the permanent hookup of well EW-1 was lower than planned as only minor changes were needed to an existing design
    - Cost for performing general operating and maintenance and minor modification activities have been lower than planned as the system has been running smoothly
    - Cost for collecting depth-discrete groundwater and soil samples during the installation of new wells was less than planned

- 200W Pump-and-Treat Remedial Design/Remedial Action work plan and preliminary design activities were completed with fewer resources than planned
- o 200 PW-1 OU (+\$0.8M) Labor and subcontract cost for general operations and minor modifications support is less than planned. In addition, efficiencies and savings experienced with the Soil Vapor Extraction (SVE) system testing prior to March 2010 as well as the removal of two old SVE units.
- o Usage Based Services (-\$1.5M) Increased cost associated with training due to the additional ARRA work in FY2010 and fleet services costs that occurred in FY2009 and FY2010. Overruns will continue to be funds-managed within the S&GRP project.
- o PBS RL-0030 UBS, G&A and DD (-\$2.2M) The negative cost variance is discussed in Appendix C.
- The RL-0040 positive variance (+\$6.7M) is primarily due to recognized efficiencies for demolition of the Industrial 7 Project (D4) (+\$0.6M) as a result of utilization of existing site equipment and materials, surveillance and maintenance costs (D4) less than expected (+\$1.3M), completion of the sampling of Cell 30 with less resources than planned (+\$0.9M), Program Management utilizing less resources (+\$1.5M), capital equipment (+\$0.3M), Usage Base Services (+\$0.2M), and underrun in overhead allocations (+\$1.9M).
- The RL-0041 positive variance (+\$2.2M) cost variance is within established reporting thresholds. The project is currently experiencing impacts associated with:
  - o Waste Sites (+\$4.9M) The positive variance is due to CSNA sites that were completed at less than anticipated cost. This is partially offset by greater than anticipated extent and severity of contamination on many waste sites resulting in more tons disposed and more controls required, thus higher than anticipated cost, as well as level-of-effort activities bearing additional costs for increased functional group support.
  - o 100K Area Project (Facilities and Others) (-\$2.7M) The negative variance is within threshold.
- The RL-0042 positive variance (+\$1.1M) reflects reduction in surveillance and maintenance requirements as the facility deactivation reached completion. Efficient use of resources to support deactivation activities with available time further aided in creating this favorable cost variance.

## FUNDING ANALYSIS

### FY2011 Funds vs. Spend Forecast (\$M)

PBS	Project	FY 2011		Variance
		Projected Funding	Spending Forecast	
<b>RL-0011</b>	Nuclear Materials Stabilization and Disposition	163.1	140.7	22.5
<b>RL-0013</b>	Waste and Fuels Management Project	162.5	156.0	6.5
<b>RL-0030</b>	Soil, Groundwater and Vadose Zone Remediation	157.6	154.6	3.0
<b>RL-0040</b>	Nuclear Facility D&D, Remainder of Hanford	142.6	139.5	3.2
<b>RL-0041</b>	Nuclear Facility D&D, River Corridor	67.7	66.5	1.2
<b>Total ARRA:</b>		<b>693.6</b>	<b>657.4</b>	<b>36.3</b>
<b>RL-0011</b>	Nuclear Materials Stabilization and Disposition	41.7	36.2	5.5
<b>RL-0012</b>	Spent Nuclear Fuel Stabilization and Disposition	80.7	79.0	1.7
<b>RL-0013</b>	Waste and Fuels Management Project	86.2	84.3	1.9
<b>RL-0030</b>	Soil, Groundwater and Vadose Zone Remediation	174.9	165.9	9.0
<b>RL-0040</b>	Nuclear Facility D&D, Remainder of Hanford	18.5	17.1	1.5
<b>RL-0041</b>	Nuclear Facility D&D, River Corridor	61.0	36.0	25.0
<b>RL-0042</b>	Fast Flux Test Facility Closure	2.4	1.9	0.5
<b>Total Base:</b>		<b>465.4</b>	<b>420.4</b>	<b>45.0</b>

#### Funds/Variance Analysis:

Funding includes FY2010 carryover and FY2011 new Budget Authority. Base funding in RL-0041 has increased by \$6.4M for the following:

- Soil remediation activities in the vicinity of the 105KE Reactor complex, Waste sites along the Columbia River and in the vicinity of the 183.1KE Headhouse. This scope is required to meet TPA milestone M-16-053.
- 105KE Reactor Interim Safe Storage design and concrete pour backs below grade to seal penetrations created by removing piping. This scope is required to support TPA milestone M-93-022.

## BASELINE CHANGE REQUESTS

In July 2011, CHPRC approved and implemented two (2) baseline change requests (BCRs), of which one (1) is administrative in nature and did not change budget, schedule or scope. The two change requests are briefly identified in the table below:

Change Request #	Title	Summary of Change
<b>Implemented into the Earned Value Management System for July 2011</b>		
BCR-PRC-11-038R0	<i>Reinstatement of 105KE Reactor Core Removal Design Scope</i>	This change request restores the budget inadvertently removed in change request BCR-PRC-11-010R0, "PMB Alignment to Contract Price Alignment" (Attachment #1) associated with the 105KE reactor core removal design. The budget is restored for WBS elements 041.02.08.04.02, "[S] Design (105KE Obstruct Removal)" and 041.02.08.05.02, "Design Core Removal". The scope was inadvertently removed with the 105KE Reactor Core Removal work scope. Since the 105KE Reactor core removal design is authorized work scope per contract modification 087, it should not have been removed in change request BCR-PRC-11-010R0. No additional funding is required as a result of this change request and no management reserve is used.
BCRA-PRC-11-041R0	<i>General Administrative &amp; Metric / Schedule Coding Changes for July 2011</i>	<p>The following administrative changes were made in June 2011:</p> <ol style="list-style-type: none"> <li>Added a milestone called "All RTD Remediation Complete" to each of 9 waste sites in project baseline summary (PBS) RL-41, gave it the CHPRC Global code for remove, treat, dispose (RTD) completion, added all parts of that waste site as predecessors, and removed CHPRC Metric Global codes from those predecessors. The waste sites affected are: 100-K-3, 100-K-47, 100-K-54, 100-K-55, 100-K-56, 100-K-68, 100-K-70, 100-K-72, and 100-K-74. This change to the performance measurement baseline (PMB) is needed because the waste site RTD action is only complete when the last part of the waste site is remediated. By making this change CHPRC is able to accurately report completion of the Metrics provided to DOE monthly while preserving the flexibility to sequence work as necessary. This revision does not change any TPA or performance based incentive (PBI) milestone dates already in the PMB. However, this change request does document a change to the previously reported RTD completion of waste site 100-K-56, which is now <b>not</b> complete since the last part of this waste site was not identified in the schedule (e.g., schedule linked completion to a part of the waste site that was <b>not</b> the last part).</li> <li>As part of restructuring for RL-0030.C Capital Asset project, the PRC PMB WBS elements through FY 2012 are recoded into the following components (see Attachment A); <b>RL-0030.01</b> – (Ops); <b>RL-0030.C1</b> – GW Remedy Imple 200 ZP-1 and 100 DX Proj Central Plateau Soil and Groundwater Cleanup Project, <b>RL-0030.R1.1</b> – Cleanup Operations, <b>RL-0030.R1.2</b> – Well Drilling Operations, <b>RL-0030.R1.3</b> – Support Operations. In addition to the recoding of subproject codes, the <b>RL-0030.C1</b> – GW Remedy Imple 200 ZP-1 and 100 DX Proj Central Plateau Soil Groundwater Cleanup Project, <b>RL-030.R1.1</b> – Cleanup Operations, <b>RL-0030.R1.2</b> – Well Drilling Operations components are coded for PARS II Project <b>RL-0030.C</b>. WBS changes are made to accommodate the above remapping of</li> </ol>

Change Request #	Title	Summary of Change
		<p>WBSs to correctly generate the defined RL subprojects. See Attachment 1. While approval of the RL baseline change proposal by S2 is required <b>BEFORE</b> the identified WBS recoding (Attachment 1) to the RL subprojects can be implemented into the PMB, the new WBS elements identified in Attachment 1 can be created and implemented into the PMB without RL approval. <b><i>This change request does not activate the new PARs codes.</i></b> Changes to CEIS data sheets at level 5 or lower are also made as appropriate (Attachment 2).</p> <ol style="list-style-type: none"> <li>3. Implement changes as documented in HPIC forms, such as control account and work package manager changes, and other changes as documented in Attachment 3.</li> <li>4. A new Functional Organization Code (FOC) is added as defined in the e-mail (see Attachment 5). There are only four (4) WBSs mapped to this new FOC, titled "40.3 – PRC Facilities and Waste Site Management" at this time, which are 040.01.21.05, 040.01.21.05.01, 040.90.02.07 and 040.90.02.07.01. The responsible Vice President is L. T. Blackford.</li> </ol> <p>There is no change to budget or scope and no management reserve is used.</p>

Overall the contract period performance measurement baseline (PMB) budget is **increased** \$2.1 million in July 2011.

No management reserve (MR) is used in July 2011. There is no adjustment to fee in July 2011. See the Format 3 Report in Appendix A and A-1 for a complete listing of the specific change requests and the impact on the PMB budget by fiscal year. The change to the Estimated Contract Price, if all authorized, un-priced work scope were definitized at the PMB values as a result of change requests processed in July 2011, is an **increase** of \$2.1 million and is summarized by fiscal year in the tables below (dollars in thousands, negative number represents reduction):

**July 2011 Summary of Changes to Estimated Contract Price**

	FY2009	FY2010	FY2011	FY2012	FYs 2009-2013	FYs 2014-2018
<b>June 2011 Estimated Contract Price</b>						
PMB	653,426	960,017	1,021,141	727,983	3,922,894	2,361,369
Mgmt Rsrv (MR)	0	0	25,965	23,499	80,690	155,220
Fee	39,712	48,772	32,322	21,600	159,927	87,417
<b>Total</b>	<b>693,138</b>	<b>1,008,790</b>	<b>1,079,428</b>	<b>773,082</b>	<b>4,163,511</b>	<b>2,604,006</b>
<b>Change by Funding Source to Estimated Contract Price in July 2011 (2 BCRs)</b>						
<b>PMB</b>						
<b>ARRA</b>						
All ARRA WBSs	0.0	0	1,020	0	1,020	0
<b>Base</b>						
All Base WBSs	0	0	1,113	0	1,113	0
<b>Change to PMB</b>	<b>0</b>	<b>0</b>	<b>2,132</b>	<b>0</b>	<b>2,132</b>	<b>0</b>
<b>MR</b>						
<b>ARRA</b>						
All ARRA WBSs	0	0	0	0	0	0
<b>Base</b>						
All Base WBSs	0	0	0	0	0	0
<b>Change to MR</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fee</b>						
<b>ARRA</b>						
All ARRA WBSs	0	0	0	0	0	0
<b>Base</b>						
All Base WBSs	0	0	0	0	0	0
<b>Change to Fee</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Change</b>	<b>0</b>	<b>0</b>	<b>2,132</b>	<b>0</b>	<b>2,132</b>	<b>0</b>
<b>July 2011 Estimated Contract Price</b>						
PMB	653,426	960,017	1,023,273	727,983	3,925,026	2,361,369
MR	0	0	25,965	23,499	80,690	155,220
Fee	39,712	48,772	32,322	21,600	159,927	87,417
<b>Total</b>	<b>693,138</b>	<b>1,008,790</b>	<b>1,081,560</b>	<b>773,082</b>	<b>4,165,643</b>	<b>2,604,006</b>

**Changes to/Utilization of Management Reserve in July 2011**

		FY2009	FY2010	FY2011	FY2012	FY2009-2013	FY2014-2018
<b>Management Reserve (MR) - End of June 2011</b>							
<b>ARRA</b>	RL-0011.R1	0	0	2,981	0	2,981	0
	RL-0013.R1.1	0	0	0	0	0	0
	RL-0013.R1.2	0	0	51	0	51	0
	RL-0030.R1.1	0	0	0	0	0	0
	RL-0030.R1.2	0	0	0	0	0	0
	RL-0040.R1.1	0	0	4,369	0	4,369	0
	RL-0040.R1.2	0	0	0	0	0	0
	RL-0041.R1	0	0	8,608	0	8,608	0
<b>ARRA Total</b>	<b>0</b>	<b>0</b>	<b>16,009</b>	<b>0</b>	<b>16,009</b>	<b>0</b>	
<b>Base</b>	RL-0011	0	0	2,000	7,400	17,400	0
	RL-0012	0	0	3,000	3,000	10,500	16,800
	RL-0013	0	0	1,500	3,000	9,500	55,530
	RL-0030	0	0	0	2,650	7,050	32,000
	RL-0040	0	0	3,242	4,023	12,244	31,900
	RL-0041	0	0	214	3,365	7,866	17,990
	RL-0042	0	0	0	61	121	1,000
<b>Base Total</b>	<b>0</b>	<b>0</b>	<b>9,956</b>	<b>23,499</b>	<b>64,681</b>	<b>155,220</b>	
<b>MR Total</b>	<b>0</b>	<b>0</b>	<b>25,965</b>	<b>23,499</b>	<b>80,690</b>	<b>155,220</b>	
<b>Changes to/Utilization of Management Reserve in July 2011</b>							
<b>ARRA</b>	RL-0011.R1	0	0	0	0	0	0
	RL-0013.R1.1	0	0	0	0	0	0
	RL-0013.R1.2	0	0	0	0	0	0
	RL-0030.R1.1	0	0	0	0	0	0
	RL-0030.R1.2	0	0	0	0	0	0
	RL-0040.R1.1	0	0	0	0	0	0
	RL-0040.R1.2	0	0	0	0	0	0
	RL-0041.R1	0	0	0	0	0	0
<b>ARRA Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Base</b>	RL-0011	0	0	0	0	0	0
	RL-0012	0	0	0	0	0	0
	RL-0013	0	0	0	0	0	0
	RL-0030	0	0	0	0	0	0
	RL-0040	0	0	0	0	0	0
	RL-0041	0	0	0	0	0	0
	RL-0042	0	0	0	0	0	0
<b>Base Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>MR Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Management Reserve - End of July 2011</b>							
<b>ARRA</b>	RL-0011.R1	0	0	2,981	0	2,981	0
	RL-0013.R1.1	0	0	0	0	0	0
	RL-0013.R1.2	0	0	51	0	51	0
	RL-0030.R1.1	0	0	0	0	0	0
	RL-0030.R1.2	0	0	0	0	0	0
	RL-0040.R1.1	0	0	4,369	0	4,369	0
	RL-0040.R1.2	0	0	0	0	0	0
	RL-0041.R1	0	0	8,608	0	8,608	0
<b>ARRA Total</b>	<b>0</b>	<b>0</b>	<b>16,009</b>	<b>0</b>	<b>16,009</b>	<b>0</b>	
<b>Base</b>	RL-0011	0	0	2,000	7,400	17,400	0
	RL-0012	0	0	3,000	3,000	10,500	16,800
	RL-0013	0	0	1,500	3,000	9,500	55,530
	RL-0030	0	0	0	2,650	7,050	32,000
	RL-0040	0	0	3,242	4,023	12,244	31,900
	RL-0041	0	0	214	3,365	7,866	17,990
	RL-0042	0	0	0	61	121	1,000
<b>Base Total</b>	<b>0</b>	<b>0</b>	<b>9,956</b>	<b>23,499</b>	<b>64,681</b>	<b>155,220</b>	
<b>MR Total</b>	<b>0</b>	<b>0</b>	<b>25,965</b>	<b>23,499</b>	<b>80,690</b>	<b>155,220</b>	

## 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 7/31/2011								Planned Subcontracting*	\$2,524,483,195
Contracts + Purchase Orders + Pcards								Contract-to-Date Awards =	\$1,736,286,465
Reporting Classification	ARRA		Non-ARRA		Total (\$)	Percent of Total	Goal (%)	Balance Remaining to Award =	\$788,196,730
	(\$)	%	(\$)	%				Goal Award (\$)	Bal. to Goal (\$)
SB	\$393,040,520	52.02%	\$456,331,821	46.53%	\$849,372,341	48.92%	49.30%	\$1,244,570,215	\$395,197,874
SDB	\$77,225,994	10.22%	\$77,231,336	7.88%	\$154,457,330	8.90%	8.20%	\$207,007,622	\$52,550,292
SWOB	\$85,049,230	11.26%	\$84,651,202	8.63%	\$169,700,432	9.77%	6.50%	\$164,091,408	(\$5,609,025)
HUB	\$18,804,771	2.49%	\$19,063,340	1.94%	\$37,868,111	2.18%	3.20%	\$80,783,462	\$42,915,351
VOSB	\$61,107,140	8.09%	\$35,347,233	3.60%	\$96,454,373	5.56%	2.00%	\$50,489,664	(\$45,964,709)
SDVO	\$13,508,230	1.79%	\$13,453,858	1.37%	\$26,962,087	1.55%	2.00%	\$50,489,664	\$23,527,577
NAB	\$14,320,387	1.90%	\$8,539,862	0.87%	\$22,860,249	1.32%	0.00%	<i>*10-year subcontracting projection</i>  PRC clause H.20 small business (SB) requirement: ≥17% of Total Contract Price performed by SB  Total Contract Price: \$5,363,111,740 17% requirement: \$911,728,996 Awarded: \$849,372,341 Balance to Requirement: \$62,356,655	
Large	\$238,709,136	31.59%	\$286,822,279	29.25%	\$525,531,415	30.27%	0.00%		
GOVT	\$118,333	0.02%	\$1,287,052	0.13%	\$1,405,385	0.08%	0.00%		
GOVT CONT	\$123,635,687	16.36%	\$233,152,200	23.77%	\$356,787,887	20.55%	0.00%		
EDUC	\$8,565	0.00%	\$100,136	0.01%	\$108,701	0.01%	0.00%		
NONPROFIT	\$35,462	0.00%	\$2,877,624	0.29%	\$2,913,085	0.17%	0.00%		
FOREIGN	\$28,773	0.00%	\$135,501	0.01%	\$164,274	0.01%	0.00%		
<b>Total</b>	<b>\$755,576,475</b>		<b>\$980,709,989</b>		<b>\$1,736,286,465</b>				

**Notes:**

1. Performance through July 2011 continues to exceed goals in the Disadvantaged Business, Woman Owned, and Veteran Owned categories and lag goals for HUB zone and Service Disabled Veteran business awards. Forty-nine percent of total awards have been made to small businesses with approximately 52% of ARRA awards to small businesses.
2. ARRA-funded awards have accounted for approximately 44% of all actions placed since contract inception.
3. Approximately 93% of the total dollars arise from service and staffing Contracts and Contract amendments with five percent of the dollars arising from P-Card purchases and the balance from 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 (Women Owned Minority Business Enterprise 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
<b>CONTRACT</b>			
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.	Ongoing