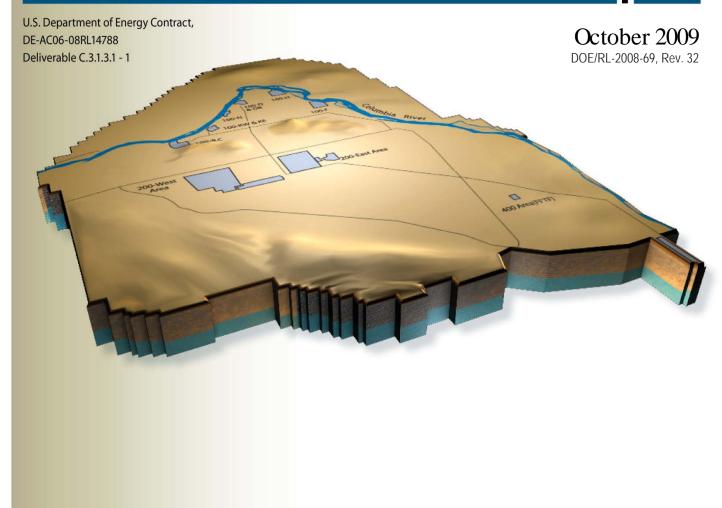


J. G. Lehew President and Chief Executive Officer

Monthly Performance Report



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EXECUTIVE SUMMARY

Focus on Safety

CHPRC completed a series of all employee meetings on October 1 reviewing the significant fiscal year 2009 accomplishments, company-wide safety statistics, and providing an overview of the Integrated Safety Management System (ISMS)/Environmental Management System (EMS), and the Voluntary Protection Program (VPP). The Workers Observing Workers (WOW) program and the Safe Zone recognition program were introduced to support safety improvement goals for FY 2010. The Waste & Fuels Management Project piloted the WOW program in early October. Several observation activities were performed and feedback is being captured to ensure a successful launch across the CHPRC team.



Members of the CH2M HILL corporate assessment team attend Phase II readiness briefings highlighting safety performance, programs, accomplishments and open actions.

A CH2M HILL corporate assessment team performed an independent progress review of Integrated Safety Management System/Environmental Management System (ISMS/EMS) implementation. CHPRC successfully demonstrated, during Phase I, that the required elements of ISMS/EMS are captured in its procedures and processes. The team observed fieldwork and conducted interviews to assess how successfully the workforce is able to plan and execute our work according to the written procedures. Their assessment helped CHPRC identify weaknesses and potential gaps in implementation. The corporate assessment team concluded that CHPRC is making significant progress and while significant actions have been taken in preparation for Phase II Verification, additional time is needed to demonstrate the effectiveness of those actions.

PFP hosted the President's Zero Accident Council (PZAC) meeting in October. Primary topics focused on Winter Safety, Employee Job Task Analysis reviews, and Emotional Wellness.

Safety messages distributed in October included *Thinking Target Zero* weekly publications addressing conduct of work, safety topic selection, electrical outlet fire safety, and worker feedback. A Special Bulletin was published to address equipment safety related to specific powered air purifying respirators used on site.

The October *On the Plateau* newsletter featured a briefing on the EMS Audit that was conducted the last week of October through the first week in November. In addition, features outlining the Safe Zone reward program and a section highlighting recent VPP Safety Excellence awards that CHPRC achieved were included in the newsletter.

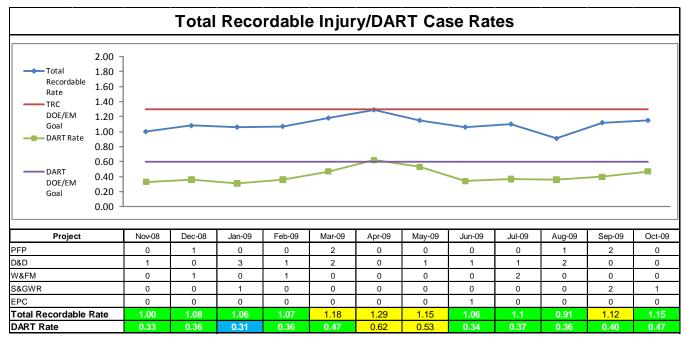




TARGET 7FRO PERFORMANCE

October 2009

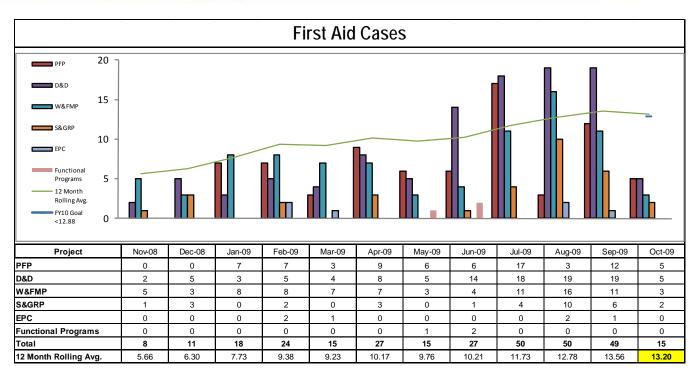
CHPRC continued focusing on integrating safety programs in all work planning and business systems and on promoting "Thinking Target Zero."



Days Away, Restricted or Transferred (DART) Workdays Case Rate – CHPRC operated over 500,000 hours during the month of October with one reported DART case. An employee picked up a case of water and experienced mid-back pain. The employee was treated with prescription medications and advised to remain off work one day. An additional DART case that occurred in August was declared in October. An employee tripped over a "yellow jacket" cord cover, and used his right leg to arrest his fall. He was referred to his personal physician for treatment and returned to work after missing one day. The two cases resulted in a 12 month rolling average DART rate of 0.47 based on a total of ten cases in the 12 month period. CHPRC established a DART case rate goal of less than 0.4 for FY 2010.

Total Recordable Injury Case Rate – October experienced one recordable injury which was a DART case as noted above. An additional recordable injury that occurred in September was declared in October. An employee overreached the scaffolding rail while attempting to pull a bungee cord and fell to the ground. The employee was treated with over-the-counter prescription strength medication. These two cases resulted in a rolling 12 month average of 1.15 based on a total of 27 total recordable injuries for the 12 month period. CHPRC established a Total Recordable Injury case rate goal of less than 1.0 for FY 2010.





First Aid Case Summary - Fifteen first aid cases were reported in October, the fewest number since May 2009. Sprain/Strain types accounted for one-third of the total number, caused by general lifting and material handling exertion, and awkward body motions.



PROGRAM SUMMARIES

Safety, Health, Security, and Quality

The ISMS/EMS project developed a Leadership Training resource that is being provided to CHPRC personnel in management or leadership positions. Leadership training is designed to further indoctrinate supervisors and managers on the concepts relating to ISMS, EMS, and VPP in order to enhance their ability to ensure safe and successful performance of work. The training emphasizes the manager's role in fostering a safe work environment that encourages workers to have a questioning attitude and ensure that work matches the words. Training has been provided to nearly 650 personnel.

The ISMS/EMS project team completed management assessment SHS&Q-ISM-MA-001. This assessment evaluated the performance of the company's ISMS/EMS Phase II assessments and corrective actions in preparation for the ESMS/EMS certification audit. One noteworthy practice was documented and no new issues resulted from this assessment.

The CH2M HILL corporate review of the CHPRC ISMS/EMS (Phase II) was conducted October 26 through November 6. The review identified several weaknesses that should be resolved with additional time focused on implementation of recent changes addressing Phase I issues.

The monthly Presidents' Zero Accident Council (PZAC) meeting was held on October 21. CHPRC's Plutonium Finishing Plant Project sponsored and facilitated the session. The Project selected Winter Safety as the theme of the meeting, both in recognition of the onset of autumn, and as an opportunity to address fall hazards (from heights, and same level). Other topics were presented included an overview of the Employee Job Task Analysis (EJTA) process – from the occupational medical provider perspective, emotional wellness, status of ISMS/EMS Phase II, tracking and trending Project safety council safety logbook entries, radiological protection postings (signage), and an update on the forthcoming VPP assessments.

Other notable OS&IH Program activities include:

- Development and issuance of the following six *Thinking Target Zero* bulletins; Conduct of Work, Safety Topics, Outlet Fire Safety, ISMS/EMS Phase II Daily Update, Worker Feedback, and PAPR Equipment Reminders.
- Support for two Subcontract Management organization initiatives: 1) a review of several Statements of Work (SOWs) to validate the adequacy of, and otherwise upgrade the OS&IH requirements; 2) a revision to the process for completing EJTAs and expediting medical examinations for construction subcontractors, in order to provide the affected subcontractor with direct access to the system, thereby improving the timeliness of information submittals (originating from a Subcontractor Quarterly Safety Meeting discussion).
- Joining with management and labor to begin strategizing the feasibility, value, and impact of developing standard EJTA templates for select brokered craft personnel.
- Publication of the revised CHPRC Contractor Safety Process document (PRC-PRO-SH-40078),
 which focused on integration of subcontractor safety program specifications, consolidation of SOW
 template options to support the Buyer Technical Representative (BTR) development of OS&IH
 criteria, and addition of Hazard Review Board criteria in defining hazardous or complex work scope.
 The resultant procedure provides the steps necessary for affected OS&IH SME to effectively assist
 the BTR in both bid pre-qualification and pre-identification of safety-related specifications, hazards,
 training, and permit requirements for the subcontracts.



- Participation in the 10 CFR 851 Worker Safety and Health Program awareness training sessions (Video Conference) in late October, sponsored by DOE/HQ, EFCOG, Labor Unions, NIOSH and the HAMMER Training Center.
- Roll-out of a CHPRC training module for Utility Vehicle Operational Safety.
- Continued representation of CHPRC through participation on three Site-Wide program development teams (Beryllium, Respiratory Protection, and Excavation Safety); a Fourth Fall Protection was kicked-off during the month.
- Continued support of the new Site-Wide Beryllium Program through development of a Beryllium Sampling Plan form and discussion with CHPRC Project representatives on the process for conducting future beryllium facility assessments.
- Completed development and introduction of the Safe Zone Recognition and Reward Program, designed to acknowledge employees for safe behaviors and practices such as those encouraged through Workers Observing Workers peer safety observation initiative.

Work Control teamed with Engineering Procurement and Construction (EPC) and Soil and Groundwater personnel in developing a path-forward to address work document issues associated with construction work activities including causal analysis, Hazard Review Board, and several other requirements, with project personnel. Actions included updates for PRC-PRO-WKM-12115, *Work Management*, PRC-GD-WKM-12116, *Work Planning Guide*, and PRC-PRO-WKM-40004, *Hazard Review Board*, as well as implementation of related changes to the JCS program. Training program requirements for planning managers as well as designation criteria for Release Authorities were established.

The Worksite Hazard Analysis form was revised to incorporate feedback from project personnel.

The CHPRC maintenance technical authority worked with the Waste Isolation Pilot Plant (WIPP) site project manager to complete review of over 200 M&TE components to support equipment closeout.

Work Site assessments were conducted to evaluate Work Management and Conduct of Operations aspects related recent retrieval events, as well assessments to evaluate implementation of PRC-MD-WKM-40214, *Work Package Review*.

Radiological Safety has focused on field mentoring and as a result has reviewed more than 20% of radiological safety technical basis documents, initiated changes to work approaches at U ancillary facilities and project controls.

Six Nuclear Safety documents were developed and submitted to DOE for approval, five documents were approved, including two Special Packaging Authorization checklists to support soil and debris removal from the 100K soil remediation project.

The Quality and Performance Assurance organization completed one surveillance and two work site assessments:

- Q&PA-PO-SURV-10-001/Work Package Review. No issues resulted from this activity.
- SHS&Q-QA-WSA-10-15/Review of Critical Lift Plans. Two findings and five OFI's resulted from this activity.
- SHS&Q-PO-WSA-10-14/Closure Action to CR-2009-0563. This review of CR closure actions resulted in no additional issues.



Environmental Quality Assurance organization completed three surveillances during the month of October:

- QA-EQA-SURV-10-001/IEP 7778 Review D&D REDOX Surveillance & Maintenance Plan to determine compliance with the EQAPP, CHPRC-00189, Section 1.0 Management and Organization. No issues resulted from this activity.
- QA-EQA-SURV-10-002/IEP 7779, Cost estimating documentation, process development and planning for communicating requirements to CHPRC work activities that will use the cost estimating process. Two findings and one opportunity for improvement resulted.
- QA-EQA-SURV-10-003/IEP 7780, Review the processes used by the 105 KW Air SPARGER Major Stack for compliance with NESHAPS requirements. One opportunity for improvement resulted.

Environmental Program and Regulatory Management (EPRM)

Continued preparation for the independent review of the EMS required by CRD O 450.1A and other activities that included the following:

- Completed revisions of various procedures to strengthen environmental involvement in procurement processes.
- Objectives and Targets implementation plans were signed and issued by senior management.
- The Environmental Compliance Officer (ECO) Training Program Description and Core Oualification Card were issued.
- A management assessment of the CHPRC EMS was performed by two CHPRC auditors and two CH2M HILL EMS auditors to not only satisfy the Internal Audit requirement of the EMS, but also to evaluate CHPRC readiness for the independent audit mandated by CRD O 450.1A. As communicated to the Executive Safety Review Board, the assessment identified two minor nonconformities and several opportunities for improvement.
- New training and awareness activities were continued, and an additional training session for Buyer Technical Representatives (BTRs) was held.
- An independent audit to validate full implementation of the EMS was initiated in conjunction with the Phase II corporate review of the ISMS/EMS.

DOE – both ORP and RL responded to EPA in an October 7, 2009, letter addressing the March 2009 Notice of Violation (NOV) regarding universal waste practices at the Hanford Site. A draft revision of the management plan for recyclable materials administered by the Site Recycling Facility (CCRC) was attached to the letter for review and concurrence by EPA. Acceptance of the plan by EPA will allow the NOV to be closed and will trigger the 180 day implementation period for changes to the management plan.

RL issued two surveillance reports: 1) a review of our self-assessment process and of our compliance with the Hanford Cultural Resources Management Plan, with no findings, and 2) a review of CHPRC environmental procedures, with two procedural changes requested and subsequently made.



As promised, EPA Region 10 published a public notice of its proposal to remove the CERCLA wastewater discharge prohibition from the NPDES permit (WA-002591-7) that was issued last summer. The public notice also stated that EPA was removing all provisions from the permit pertaining to discharge from 300 Area Treated Effluent Disposal Facility (TEDF), due to the shutdown of that facility (no comment on this was requested). CHPRC will provide comment supporting the EPA proposal, prior to the comment period closure on November 16, 2009. Reissuance of the permit with the prohibition removed will resolve the permit appeal filed in July 2009.

In addition, notices were provided to EPA of the successful completion of the NPDES QA 29 study (our laboratories scored 100%), and completion of a QA plan for NPDES Permit WA-002591-7 (due November 1, 2009).

The Environmental Quality Assurance organization completed five surveillances and a management assessment during the month of October:

- Completed: QA-EQA-SURV-10-001/IEP 7778 Review D&D REDOX Surveillance & Maintenance Plan to determine compliance with the EQAPP, CHPRC-00189, Section 1.0 Management and Organization. No issues resulted from this activity.
- Completed: QA-EQA-SURV-10-002/IEP 7779, Cost estimating documentation, process development and planning for communicating requirements to CHPRC work activities that will use the cost estimating process. Two findings and one opportunity for improvement resulted.
- Completed: QA-EQA-SURV-10-003/IEP 7780, Review the processes used by the 105 KW Air SPARGER Major Stack for compliance with NESHAPS requirements. One opportunity for improvement resulted.
- Completed: QA-EQA-SURV-10-037/IEP 7959, Observe SGRP sample container storage areas to determine compliance with HASQARD.
- Completed: EPRM-EP-MA-10-015/ IEP 8469, CHPRC Environmental Management System (EMS), resulting in two minor non-conformities and 11 opportunities for improvement.
- Conceptual agreement was reached with Ecology to not pursue renewal of the FFTF ST-4501 state waste discharge permit, and instead address the remaining 400 Area waste water streams in the site wide ST-4511 permit. An amendment to the renewal application for ST-4511 will be prepared to incorporate these new streams.

Engineering Procurement and Construction (EPC)

ARRA

200 West Pump & Treat Project has awarded all of long lead procurement contracts for the Process Facility equipment.

100 D Expansion (DX) Pump & Treat continued with the DX design effort.

Continued with the DX design effort leading up the 90% design review in early November. Design changes from a joint decision by CHPRC and DOE on resin optimization are incorporated in the 90% design. Construction activities included procurement of materials, installation of HDPE piping and road crossings, fabrication of well racks, placing of concrete for the process building stem walls foundation, and receipt of the transfer building materials. The AWA for HX acceleration has been approved.

The Alpha Caisson Retrieval / Mobile Hot Cell Project continued supporting Acceptable Knowledge and waste stream development for hot cell implementation. Additionally the Project continued researching isotopic content for developing dose to curie ratios.



Base

Finished construction of Modutank 2 and turned over system to SGRP Operations.

Modutank 3 construction is 80% complete, with expected completion in November 2009.

Completed Modutank Remedial Action Work Plan.

Continued construction activities on the KX and KR4 Phase II pump and treat expansion.

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

Construction activities on the KR4 Phase II pump and treat expansion continued.

Central Engineering received a letter from RL accepting a recommendation to implement DOE-STD-1020-2002, Natural Phenomena Hazards Design and Evaluation Criteria for Department of Energy Facilities, and the 2006 International Building Code (IBC), replacing the currently used DOE-STD-1020-1994 and the 1997 Uniform Building Code. Acceptance of the recommendation by RL will bring the CHPRC structural codes into alignment with commercial codes used within Washington State.

The PFP Vital Safety Systems (VSS) Assessment was published. No findings, four Opportunities for Improvement and two Noteworthy Practices were identified.

Engineering provided technical support and leadership to the 2009 EFCOG Electrical Safety Meeting and Workshop hosted by the Hanford major contractors and DOE RL October 5-9. The workshop was attended by electrical safety professionals, electricians, electrical engineers, managers and DOE electrical safety representatives from sites throughout the DOE complex. Workshop topics included: Electrical Safety Training, 10 CFR 851; NFPA 70E "Standard for Electrical Safety in the Workplace"; ISA Standards; NRTL equipment listing; and Subsurface Investigation of encased and buried electrical conductors.

Engineering completed a Work Site Assessment of the Design Authority Qualification process described in PRC-PRO-EN-20051, Engineering Selection, Qualification, and Training. The Assessment resulted in one Finding and one Opportunity for Improvement.

The PRC Chief Engineer chaired the Energy Facilities Contractors Group (EFCOG) Engineering Practices Working Group (EPWOG) semi-annual meeting. One of the key topics of the meeting was Commercial Grade Item Dedication programs. Development of DOE complex-wide CGD programs is being led by the EPWOG.

Central Engineering supported recovery from a Waste Retrieval Occurrence where an in appropriate positioning of a crane was identified. The crane was positioned on a slight slope adjacent to the burial trench as opposed to being on a flat platform. Assistance was provided in the preparation and review of soil and loading calculations.

Business Services and Project Controls

CHPRC held an Annual Project Review with DOE-RL management and staff in October. The review highlighted major proposal initiatives implemented in the first year of the PRC including submittal of the ARRA proposal and specific scope accomplishments across CHPRC programs and projects.

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



CHPRC prepared and submitted responses to the DOE-RL RCR Comments on Rev. 1 of the PMB and reached agreement with RL on the CHPRC response for each comment. A plan was developed to produce Revision 2 of the PMB in light of these comments. The plan is to complete the bulk of the replanning work in November leaving time to complete the risk analysis, final reviews and submittal of a BCR to implement these changes at the end of December.

CHPRC approved and implemented thirteen (13) baseline changes requests in October. Eight of the change requests were administrative in nature with no change to scope, budget or management reserve. Of the remaining five change requests:

- An advanced work authorization (AWA-R13-10-001), initiated implementation of Contract Modification 068 to accelerate the start dates for the Central Characterization Project TRU characterization and TRU waste shipments for \$1.722 million in fiscal year 2010.
- Change request BCR-PRC-10-004 implemented DOE direction to complete the Feasibility Studies for the preparation of the 200-CW-5 and 200-PW-1/3/6 Operable Units and to prepare a single Z Area Liquid Discharge Sites Proposed Plan and Record of Decision with no change to the contract budget base.
- Change request (BCR-013-10-004) incorporated GPP planning on the container restraint system and related work scope associated with the storage of Slightly Irradiated Fuel with no change to contract budget base.
- Two change requests (BCR-R40-09-002, Rev. 1 and BCR-PRC-10-009) implemented corrective actions as identified and agreed to in the DOE-HQ approved Corrective Action Plan for the *External Independent Review for the Three RL American Recovery & Reinvestment Act Projects* which increased the overall contract budget base by \$29.538 million.
- Management reserve of \$70K was used utilized and \$403K was also generated by the Projects revising the approach to complete planned scope resulting in an overall increase of \$333K in management reserve.

Subcontract Management issued significant revisions to procurement procedures that included updates to PRC-RD-AC-10320, PRO-192, PRO-123, and PRO-186. The primary changes included consolidation of BTR requirements into PRO-192, rewriting the procurement process described in PRO-123 and completely reworking the SOW templates and instructions in PRO-186. The changes resolve comments generated during ISMS/EMS preparatory reviews and the consolidation of subcontractor ES&H requirements into PRO-40078.

A new revision of Special Provision SP-5 for Onsite Services was issued during October. Changes included reworking the ES&H section to bring it into alignment with the revised PRO-40078 as well as clarifying the requirements for subcontractor labor hour reporting and preparation of EJTAs.

Subcontract Management reviewed the SOWs for contracts issued since June 2009, which are effective in FY 2010 to determine if they require review by the BTR for updating to meet Industrial Safety & Health / ISMS requirements established in PRC-PRO-SH-00478. Sixty-one SOWs were identified and provided to BTRs for review and update.

Facility Services completed actions that resolved material storage issues at 190KE, which were identified during a Self Assessment to include; new signage for QA/QC Hold areas (inside and outside). Removal of green tags from improperly stored filters; installation of Omni locks in material storage rooms A and B of 1724K; relocation of empty drums observed in an outside storage area that had recently been relocated from 1706 building. In addition, numerous pieces of equipment were sent to Convenience Storage or excessed and some materials were provided to projects for use. A material



control area has been fenced off within 190KE, where Material Coordinators can stage work package material, or other materials that require control.

As of October 31, Restroom/Shower Trailers and 74 Mobile Offices and Craft Trailers (94 total) have been accepted for occupancy.

Facilities and Property Management developed plans and hired temporary staff to deploy an ARRA Facilities Compliance Verification Team starting November 2, 2009. The task team will perform a thorough post occupancy verification of all ARRA facilities to ensure compliance to all applicable fire protection, safety, security, emergency preparedness, cold weather protection and preventive maintenance requirements.

CHPRC reviewed the Interface Agreements in place as part of the annual review and as a readiness check for the ISMS/EMS assessment, and provided recommendations to each of the Projects for older documents to update, combine, or delete.

CHPRC completed an Administrative Interface Agreement (AIA) for Johnson Controls Inc., (JCI), reducing the number of interface agreements with JCI to one.

CHPRC worked with WRPS and MSA and agreed upon a format and level of content detail for the Service Delivery Documents (SDD) as a first step in review of all of the MSA delivered J.3 services. There are sixty-three services provided by the MSA that will be clarified in the SDDs over the next several months. CHPRC will prioritize the SDD review and development based on the highest priority being Usage Based Services (UBS) that are the most active / prone to misunderstanding, and the lowest priority being those services that are working well and require minimal attention.

Interface Management provided review and comments to MSA on the Infrastructure and Services Alignment Plan (ISAP), a contract deliverable for the MSA. The ISAP will provide the MSA with an improved understanding of the CHPRC future service needs.

Interface Management developed an AIA with MSA for CHPRC Waste & Fuels use of Super Dumps by Construction Forces and their interface with MSA Motor Carrier Services Program and Fleet Services. The AIA is currently undergoing final MSA review.

Interface Management reached an agreement with WCH on AIA for CHPRC operation of the 300 Area Retention Systems. CHPRC formal approval of AIA is on hold pending RL direction to CHPRC to operate the 300 Area Retention Systems.

Interface Management continued to work with AMH and CHPRC SH&Q and Procurement in addressing issues associated with implementation of 10 CFR 851, Worker Safety & Health Program, for CHPRC Subcontractor employees and completion of associated action items from CHPRC September 23, 2009, Quarterly Subcontractor Safety Meeting.

Interface Management worked with CHPRC Facilities & Property Management to finalize a list of CHPRC General Purpose non-Rad Facilities whose maintenance is funded through CHPRC Contract Management & Facility.

Interface Management finalized updated CHPRC/Advanced Med Hanford, Memorandum of Agreement for the Performance and Payment of Services.

During October, Prime Contract Management received and processed six contract modifications (modifications 71, 72, 74, 75, 76, 77).

Prime Contract Management collected and submitted the completion documentation for Contracting Officer acceptance for the FY 2009 incentives valued at \$12.7M that were incorporated into the contract via Mods 059 and 073.



The Correspondence Review Team reviewed and determined distribution for forty-five incoming letters from RL and reviewed fifty-five outgoing correspondence packages.

Communications and Outreach

During the month of October, Communications supported the Department of Energy in numerous requests related to cleanup at Hanford's BC Control Area (BCCA). A story posted in a September issue of the Tri-City Herald on CHPRC's innovative efforts to survey the contamination at the BCCA caught the interest of the *Seattle Post Intelligencer*. The *Seattle PI* then posted an article emphasizing the contamination history of the BCCA, which triggered numerous media requests and stories. CHPRC responded to a number of media calls including calls from the *New York Times*, MSNBC's *The Rachel Maddow Show* and *National Geographic*. Communications prepared a fact sheet on the BCCA for DOE to post on their website.

News releases to local media were sent on CHPRC's progress related to the 100K East Basin soil remediation and also a corporate award for small business support. In addition, CHPRC hosted two media events, one showing progress of demolition at the 212-N, P and R facilities for local media, and an exclusive interview at T Plant where workers described waste packaging efforts for Northwest Public Radio.

Related to Recovery Act hiring, Communications fielded media calls from *CNNMoney* and the *Seattle PI*. CHPRC also submitted an op-editorial article to the Tri-Cities Area Journal of Business on progress of Recovery Act work. Other Recovery Act information requests included supporting DOE Headquarters with articles for their newsletter regarding 100K East Basin soil remediation and an article on the BCCA. Both articles showcased Recovery Act work at Hanford.

CHPRC provided information on groundwater cleanup efforts for Weekly Reader, an educational publication for middle-school aged children, and on our recruiting efforts and the low cost of living in the Tri-Cities for the *Tri-City Herald*.

Other areas of support were the publishing of the monthly newsletter, On the Plateau, showcasing employee, project and safety accomplishments, and CHPRC Recovery Act Update weekly newsletter capturing CHPRC's stimulus funded accomplishments including articles on new hires and remediation efforts.

Communications successfully conducted all-hands meetings for CHPRC projects and organizations the week of Oct. 1.

Communications continued supporting ISMS/EMS programs (Target Zero, Take Five Safety series, WOW, VPP) through poster campaigns, fliers, all-employee e-mails and committees, as well as revising and reprinting the ISMS/EMS Pocket Guide and Green Gazette.

Community Outreach efforts included the United Way campaign, which reached a record high in employee pledges, surpassing \$219,000 in contributions with 445 donors. Communications also supported 'Holiday Giving for the Richland School District' to fill 75 gift bags for school-aged children with special needs.



PROJECT SUMMARIES

RL-0011 Nuclear Materials Stabilization and Disposition

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

American Recovery and Reinvestment Act (ARRA)

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

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

Cold and dark isolation was verified for PFP ancillary building 2734-ZJ, nitrogen storage tank/pad, in preparation for removal of the vendor-owned tank in November, subject to plant priorities.

Decommissioning of the nitrogen generator facility near the 2731-ZA building and preparations for cold and dark isolation were also initiated with draining of the coolant from this structure.

Insulators continued removal of asbestos insulation from piping in the 234-5Z building, bringing the total removed under Recovery Act funding to more than 4700 feet.

The initial phase of removal of glycols and other regulated materials from the 234-5Z building was completed. The materials are being handled in a manner which protects worker safety and maintains compliance with applicable environmental regulations.

Base

De-inventory of Special Nuclear Material (SNM) continues. All 3013/9975 containers and all Hanford Un-Irradiated Fuel Packages have been shipped from PFP, and the last of the 19 excess sources and standards to be dispositioned by September 30, 2009, have been shipped to the Central Waste Complex (CWC). De-inventory of slightly irradiated fuel is proceeding on schedule, and terminal cleanout operations are continuing in the 2736-Z/ZB Vault complex.

D&D teams continue removing process equipment from the Plutonium Reclamation Facility (PRF) (236-Z Building) gallery glove boxes, and have completed process equipment removal from the first floor west glove box along with NDA to help determine "hot spots" for future decontamination. Process equipment removal from the second floor west gallery glove box is 70% complete. PRF canyon entries focused on reactivation of the canyon crane during October. The 30% design review for the PRF pencil tank lay down, tank cutting, and transport system is complete. Multiple shear cutting demonstrations were held to verify success during size reduction evolutions; however, the cost and schedule duration associated with this approach are of significant concern. A decision by senior management on alternatives for pencil tank removal is under way and should be completed by mid-November.



PRF NCOs conducted a one-day training session for a two-week period of time for the new workers at PFP for advanced dress/undress methods to get individuals out of highly contaminated PPE clothing. Approximately 170 individuals successfully completed this training.

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

RL-0012 Spent Nuclear Fuel Stabilization and Disposition

DOE completed the STP Phase 1 Onsite Technology Readiness Assessment (TRA). Four critical technology elements (CTEs) were identified by the team. All four of these CTEs received a technology readiness level (TRL) score of 4, which is better than the TRL 3 score that was required for approval at Critical Decision 1. CHPRC had performed a self assessment prior to this TRA, identifying 19 CTEs, all of which were assessed at equal to or greater than TRL-3. Recommendations and conclusions of the TRA team endorsed the current project scope and plans for advancing the technology with no new required actions.

The STP team received the Draft Engineering Container Sludge Disposition TRA report from DOE for factual accuracy review. CHPRC STP team, in a response for an expedited turnaround, responded with comments to DOE within the week.

STP Engineers and Construction Services, with support from 100K operations personnel, completed the installation of the Settler Tank Sludge Retrieval systems, and initiated Construction Acceptance Testing of the skids.

STP held an information session at WSU Tri-Cities with six vendors who expressed interest in participating in the Phase 2 of the project which is an alternative evaluation demonstration (treatment and packaging of EC/ST sludge).

RL-0013 Waste and Fuels Management Project

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

ARRA

Training of personnel Nuclear Chemical Operators (NCOs) and Radiological Control Technicians (RCTs) continued with mockup and on-the-job (OJT). In addition, installation of office and restroom trailers was completed. M/LLW shipped 29.4m³ and completed 56.0m³ of M-91-42 waste during the month. In addition, M/LLW shipped 1.0m³ of M-91-43 waste. TRU Retrieval successfully shipped 268.2 cubic meters (m³) of waste to treatment, storage, or disposal (TSD) facility, removed 62.5m³ of suspect-TRU waste from waste trenches, and initiated excavation to assess removal of 3A Trench 17 Boxes 3 and 12. Next Generation Retrieval (NGR) project issued the Functional Requirements Document for review and briefed Carlsbad Field Office Manager on planned single waste stream, "box & go," and TRU waste shredding. The Safety Design Strategy for the Alpha Caisson Retrieval Project was completed and is in final sign-off cycle. The Waste Receiving and Processing Facility (WRAP) completed Nondestructive Examination (NDE) of 305 drums and NDA of 338 drums. Central Characterization Project (CCP) implementation continued supporting programmatic WIPP certification startup activities at WRAP. The removal of the remaining CO2 blaster equipment was completed at T Plant. Continued procurement activities and staff ramp-up for waste deliveries to the ERDF including training of newly hired teamsters, preparations for use of 9 roll off transports, and use of "Super Dump Trucks" in support of soil remediation for BC Control Area. The mixed waste disposal trenches received seven offsite shipments (17 containers), one on-site transfer (two containers) and shipped two on-site transfers (two ETF tankers).



Base

The WFMP continued maintaining facilities in a safe and compliant condition. The Waste Encapsulation and Storage Facility (WESF) continued support of Randolph Construction for roof replacement activities. The Central Waste Complex (CWC) shipped nine off-site shipments (303 containers), shipped 9 on-site transfers (601containers), and received 34 on-site transfers (193 containers). The 200 Area Treated Effluent Disposal Facility (TEDF) processed 1.5M gallons. The mixed waste disposal trenches received and placed the Navy Reactor Compartment ex-USS Triton #1 (non-PBS funded).

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

Recovery Act dollars are at work across the Central Plateau and along the Columbia River, constructing two groundwater treatment facilities and numerous wells that will be used for monitoring, extracting, and remediating groundwater near the Columbia River. Within the 100-HR-3 Operable Unit, the DX Groundwater Treatment Facility made signification process in the construction of the facility. The concrete for the footings, stem wall, and foundation was successfully placed during the month of October. Overall, the construction of the facility is ahead of schedule. Workers performed the foundation work in the early morning and poured approximately 250 cubic yards of cement. Construction of the structure is expected to begin in the coming weeks. Recovery Act funding has allowed CHPRC to prioritize the DX project and accelerate its construction, whereas it might not have started until much later under base funding. The DX pump-and-treat system is being designed to help protect the Columbia River by cleaning up Chromium 6-contaminated groundwater in the 100 Area. Additionally, Recovery Act funding is being used across the Hanford Site to prepare for and complete the drilling of numerous wells that will be used for monitoring, extracting, and remediating

groundwater. Recent progress includes:

- 100-HR-3 D Area: 12 wells have been drilled, constructed, and developed. The documentation to initiate drilling on the next 14 wells is in process. Drilling at three of the 14 wells has been initiated, and the remaining wells are awaiting approval from the State Historic Preservation Officer.
- 100-HR-3 H Area: 14 wells are being installed in support of the Remedial Process Optimization effort to increase the productivity of the treatment facilities. Three wells are in process, with one well developed, one well is under construction, and one well is in process of being drilled to total depth.
- 100-BC-5: Drilling continued on two of the four wells.
- 200-ZP-1 Expansion: Drilling continued on six wells in support of the 200 West Groundwater Treatment Facility. Two wells were developed, one well is under construction, and the remaining three are in the process of being drilled to total depth.
- 100-NR-2: Drilling on the 171 wells for the expansion of the strontium-90 apatite barrier continued with 12 wells being drilled and constructed. As a result of low Columbia River water elevations, the development of the wells is progressing slower than expected. Three of the twelve wells were developed and development will continue to be dependent on the water elevations.

Base

Three of five new wells required to support the Phase 2 realignment of the KX and KR4 pump-and-treat systems have been accepted from the driller. Drilling of the remaining two wells is pending completion of cultural reviews to support the excavation permit.



EPC Projects in Support of S&GRP ARRA

All long-lead equipment contracts have been awarded. Concerns with pipe and well locations in the 200 West Area near the burial grounds is an emerging issue. This will require controls for nuclear safety concerns and has the potential to cause relocation of wells impacting modeling. Tc99 inventory and impact to the ERDF life span is an emerging issue.

Design changes from a joint decision by CHPRC and DOE on resin optimization have been incorporated into the DX 90% design. Construction activities included procurement of materials, installation of HDPE piping and road crossings, fabrication of well racks, placing of concrete for the process building stem walls foundation, and receipt of the transfer building materials. The AWA for HX acceleration has been approved.

Base

Finished construction of Modutank 2 and turned over the system to SGRP Operations. Modutank 3 construction is 80% complete and the expected completion is November 2009.

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

Continued construction activities on the KX and KR4 Phase II pump and treat expansion.

In October, 265 well locations were sampled with a total of 621 samples being collected. 81 aquifer tube samples collected from 25 tubes at 14 sites.

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

ARRA

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

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

CW-3 Waste Sites characterization reports were completed and sent to RL.

Demolition of 212N was completed. Demolition of 212R and 212P are continuing.

Mobilization of trailers and equipment has begun in preparation for the Arid Land Ecology (ALE) Reserve D&D.

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

Results of the BC Control Area (BCCA) aerial contamination survey will be mapped and used to refine cleanup requirements by mid-November. Remediation was initiated for the BCCA using super dump trucks; six acres have been radiologically down posted.

Base

Planned surveillance and maintenance (S&M) activities continue. Preparations are in progress to allow change out of the B Plant high-efficiency particulate air (HEPA) and pre-filters. While completing the annual maintenance on the B Plant exhaust fans, a bearing that needed to be replaced was discovered. A work package has been written and is in the approval process to replace the bearing.



RL-0041 Nuclear Facility D&D, River Corridor

ARRA

Work continued in the 100K Area with the completed demolition of the 118KE Rod Cave Facility. Workers continued characterization of 183.1KW, 183.3KW, 183.7KW, 115KE, 116KE, and 117KE and completed characterization at MO969 and 183.2KW. Cold and dark activities continued on 115KE, 116KE, 117KE, and 183.7KW and completed cold and dark activities for 183.1KW, 183.2KW, and 183.3KW. Initiated demolition and load out of MO969 and MO048.

Continued waste site remediation of 100-K-56 and 100-K-42 RTD sites.

Contamination levels in UPR-100-K-1 required modification to the transportation documentation. Work was paused in the under basin work and the work crew shifted to pipeline remediation for waste sites 100-K-47, 100-K-56, and 100-K-3.

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

Base

Initiated cold and dark activities for 182K, Water Reservoir Pump House.

The construction of the permanent container storage area for waste site remediation activities was completed.

RL-0042 Fast Flux Test Facility (FFTF) Closure

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

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

KEY ACCOMPLISHMENTS

RL-0011 Nuclear Materials Stabilization and Disposition

11.02 Maintain Safe and Compliant PFP – Base

- To support future deactivation of the Hanford Patrol Central Alarm Station at PFP, facility modifications to enable remote monitoring of the Criticality Alarm System (CAS) panels in the 321 power control room were completed for Criticality Alarm Panels (CAP) 1 through 6. Completion of CAPs 7 and 9 are planned for November.
- Completed annual video inspection and leak testing of the 291-Z-1 stack probe in support of satisfying the National Emissions Standards for Hazardous Air Pollutants, (NESHAP) requirements.
- Successfully completed 291-Z air sample vacuum system (ASV) outage. The scope of the outage was to replace a Trap Silencer Tank (TST), ASV #2 pump discharge valve and worn out components within the breaker cubicle.
- Successfully completed TSR six- month criticality alarm system horn sounding/testing. No deficiencies were identified.
- In preparation for the Environmental Management System (EMS) independent audit, an internal assessment of PFP EMS conformance to the ISO 14001 Standard and the DOE requirements was completed



• In response to the declaration of PFP transition to CERCLA, the State of Washington Department of Health is in the process of removing the PFP stacks from the radioactive air license for the Hanford Site

11.04 Disposition SNM - Base

- Authorization to ship the slightly irradiated fuel to the 200 Area Interim Storage Area (ISA) was received on September 30, 2009
- Shipped two Interim Storage Casks (ISC) to the 200 Area ISA. As the second ISC was being placed into the storage location, the ISC dropped approximately one foot to the pad. An investigation of the incident at the ISA was completed and the ISC lifting equipment was inspected for damage from the drop. No damage was found. Corrective actions will be completed and shipments resumed sometime in November.

11.05 Disposition PFP Facility - Base

- Process equipment removal from the PRF second floor west gallery glovebox is 70% complete.
 Integration of new teams to get field experience has slowed monthly progress but the concept of training new workers with experienced workers will help in the future for completing CHPRC milestones.
- Progress continued with the PRF canyon entries for reactivation of the canyon crane with some electrical work left to do for Task 5. It was determined that a new cable reel would be needed. Work efforts are under way to obtain the reel while also changing the work package to allow for installation.
- The CHPRC engineering team received the 30 percent design for the PRF pencil tank lay down, tank cutting, and transport equipment, and the design scope has been placed on hold. A review by senior management of alternative approaches for pencil tank removal is under way and should be completed by mid-November.
- PRF NCOs conducted a one-day training session for a two-week period of time for the new workers at PFP for advanced dress/undress methods to get individuals out of highly contaminated PPE clothing. Approximately 170 individuals successfully received this training.
- The South Canyon Airlock (SCA) containment tent has been set up in preparation for entries to allow for tank measurements and characterization. This will lead into clean-up and disposition of the tank and other equipment in SCA.
- The rough draft of the work instructions for entries into 242-Z was distributed for review and comments incorporated. The work scope includes disposal of the combustibles, addressing the ventilation control, waste characterization and the inspection of the fire suppression system.
- Initiated discussions with Waste Support Services on the various packaging options for the high dose waste in 242-Z. Unshielded waste in drums or Standard Waste Boxes (SWBs) are limited to 200 millirem per hour at contact. It is expected that shielded drums or SWBs will be needed at various times in the project. The use of shielded SWBs requires approval from DOE.
- An evaluation of the feasibility of performing nondestructive analysis of the glove boxes through the wall between 242-Z and the Analytical Laboratory to support revision of a Criticality Safety Evaluation Report (CSER) for removal of the glovebox equipment was initiated.
- All of the members of the 242-Z work team have attended the dress/undress training to support entries into high contamination and airborne areas.
- Initiated evaluation of several options to obtain the required air sampling of the 242-Z tank room.



11.05 Disposition PFP Facility – ARRA

- The following D&D work was performed in the Laboratory Areas of PFP:
 - o Completed fixative application to internals of the Analytical Laboratory, Room 146-1, 2, 3, and 4 glovebox unit, separated the unit from its E4 connections, and staged the glovebox unit for transfer to the PFP solid waste organization for disposal
 - Completed fixative application to internals of the Standards Lab Room 221E Hoods 221E-1,
 2, 3 (three separate hoods) in preparation for their removal
- The following D&D work was performed in the RMA/RMC Line Areas of PFP:
 - o Completed chemical decontamination of glove boxes HC-230C-3 and HC-230C-5 in Room 230C pending analysis of the measurement results
 - O The mechanical isolation and internal equipment removal was started for glove boxes HA-19B1 and HA-19B2 in Room 235B. Work in October included the replacement of glovebox inlet filters, repair of a cracked panel on the HA-19B1 ceiling, removal of external cooling coils and supply lines, and removal of induction furnace supply lines.
 - O Note: above margins don't line up, information is presented differently than for Base, and there is no information here on Balance of 234-5Z D&D, Facility Mods, etc.

RL-0012 Spent Nuclear Fuel Stabilization and Disposition

12.16 Sludge Treatment Project (STP)

- EPA and DOE have approved KBC-40467 Rev 1, Quality Assurance Project Plan/Sampling and Analysis Plan (QAPjP/SAP) for Containerized KW Settler Tank Sludge Sampling
- STP has received five bids to modify Maintenance and Storage Facility (MASF) to install a mock-up pool of the 100K West Basin. The project team initiated the proposal evaluations and subsequent contract award will be issued the first week of November.
- STP Engineering organization met with DOE representatives to finalize the definition of the CD-1 package and Conceptual Design Report contents
- STP issued the Project Execution Plan (PEP)
- STP initiated testing of KOP processing systems at MASF

RL-0013 Waste and Fuels Management Project

ARRA

13.01 Project Management

- Training continued for the ARRA-funded staff
- Support of installation of office and restroom trailers was completed

13.04 Mixed Low Level Waste (MLLW) Treatment

- Ramped up shipment of Legacy LLW from the CWC and WRAP to Offsite processing.
- M-91-42 TPA:
 - o 29.4m³ shipped and 56.0m³ completed during month
 - o 7,993m³ shipped and 7,852m³ completed since January 2003
- M-91-43 TPA:
 - o 1.0m³ shipped and 0m³ completed during month
 - o 662m³ shipped and 647m³ completed since January 2003

13.05 TRU Retrieval

- Shipped 268.2 cubic meters (m³) of waste to treatment, storage, or disposal (TSD) facility
- Removed 62.5 m³ of waste from waste trenches



- Assayed 5 boxes using Portable Box Assay
- Disassembly of 3A Trench 17 Boxes 82 and 80
 - Completed Simulation Test Site (STS) trench mock-up activities for disassembling Box 82 lid using the long-reach grabbing and cutting tools
 - o Verified tools and methodology and integrated STS lessons learned into work instructions
 - o Completed fabrication of the wooden cover box for Box 82
 - o Initiated procurement of additional tools and materials based on STS mock-up
- Initiated excavation to assess removal of 3A Trench 17 Boxes 3 and 12
- Received 12 concrete shielded overpacks for high-dose containers
- Next Generation Retrieval (NGR)
 - o Issued Functional Requirements Document for review
 - o Briefed Carlsbad Field Office Site Manager
 - Single Hanford Retrieval Waste Stream and use of Standard Waste Boxes were well received
 - Planned "Box and Go" and TRU Waste shredding was rejected
 - Investigating "Direct Transfer" instead of "Box & Go" for TRU containers without WIPP prohibited items.
- Alpha Caisson Retrieval
 - o Issued draft Functional Design Criteria for review
 - o The Project Review Board Charter was approved
 - o Determined that the project will proceed under RCRA regulatory framework
 - o Completed Safety Design Strategy; in final sign-off cycle
 - o Selected caisson access from the top for further conceptual development
 - o Completed second in-process design review of AREVA's General Arrangement drawings
 - Project Chief Engineer and Operations Manager visited AREVA's Mobile Hot Cell operation in France to evaluate functionality as it applies to the project

13.06 TRU Repackaging

- Completed repack of 62 containers (12.9 m³) at T Plant
- Continued the training of Nuclear Chemical Operators (NCOs) and Radiological Control Technicians (RCTs)
 - o T-Plant staff continued mock up training, and OJT training with the new hire NCOs in TRU repack operations.
 - o Continued the operation of two repack lines in a training mode
- Continued Pu-238 preparation activities

13.07 Waste Receiving and Processing Facility (WRAP)

- Nondestructive Examination (NDE) 305 drums
- Nondestructive Assay (NDA) 338 drums
- 65 drums and five SWBs received from PFP
- Implemented cold weather protection inspections

13.08 T Plant

- Treatment and disposal activities
 - o Completed the removal of remaining CO2 blaster equipment including the supporting connex box
 - Supported completion of demolition and disposal of the old change trailer 221-TB



- Supported completion of preparations and removal to excess of the two double walled stainless steel tanks near 277T
- Shipments/Receipts/Compaction
 - o Shipped 104 completed Repack containers to the Central Waste Complex (CWC)
 - o Shipped 13 Puck drums
 - Shipped one waste box and two roll off boxes

13.10 ERDF Additional Capabilities

- Completed training of newly hired teamsters
- Completed preparations for use of 9 roll off transports
- Initiated use of "Super Dump Trucks" for soil remediation
- Continued procurement activities and staff ramp-up for waste deliveries to the ERDF

13.15 TRU Disposition

- AMWTP Shipment Gap Analysis completed/Issues identified and addressed
- Developing Close-out Schedule for Hanford TRU Program
- Comprehensive Inventory Database for 2008 was verified and validated
- Central Characterization Project (CCP) implementation continued:
 - o Supporting CCP requests for public releases of AK documents
 - o Supporting programmatic WIPP certification startup activities at WRAP
 - Nondestructive Examination vs. Real Time Radiography
 - Nondestructive Assay
 - Head Space Gas Sampling

13.21 Mixed Waste Disposal Trenches

- Shipped two on-site transfers, two ETF Tankers
- Received seven offsite shipments, 17 containers
- Received one on-site transfers, two containers

Base

13.02 Waste Encapsulation and Storage Facility (WESF)

- Continued support to Randolph Construction for roof replacement
- Lower roof repair suspended due to lower ambient temperatures
- Continued support to the Energy Savings Performance Contract construction demolition and upgrade activities

13.07 Waste Receiving and Processing Facility (WRAP)

• Maintained the facility in a safe and compliant condition

13.08 T Plant

• Maintained the facility in a safe and compliant condition

13.09 Central Waste Complex (CWC)

- Completed nine off-site shipment, 303 containers
- Completed nine on-site transfers, 601 containers
- Received 34 on-site transfers, 193 containers

13.11 Liquid Effluent Facilities

- Received (October) 48 tankers; (CY) 519 tankers
- Treated (October) 0 gallons; (CY) 22M gallons



- 200A Treated Effluent Disposal Facility (TEDF) discharged (October) 1.5M gallons; (CY) 334M gallons
- Maintenance activities
 - Completed 3 tank inspections to meet permit requirements (SWRT Tank B, Concentrate Tank B, and Verification Tank A)
 - Commenced routine Cold Weather Protection activities
 - o Received 2 tankers of wastewater from a new generator (212 NPR)
 - o Replaced lamps and tubes in Ultra Violet/Oxidation (UV/OX) unit
 - o Completed decon and change out of blades on the Thin Film Dryer rotor
 - Completed draining and lock and tag of 92 percent acid lines for replacing diaphragm valves (#1 priority for EZAC)

13.16 SNF Disposition

- Slightly Irradiated Fuel (SIF)
 - o Continued progress toward transfer of SIF to the 200 Area ISA

13.21 Mixed Waste Disposal Trenches

- Maintained the trenches in a safe and compliant condition
 - 218-W-5 MWT 34 Placed fall protection railing along South end and commenced surface sealing of the top of Module 3
 - 218-E-12B Concentrated effort in progress to minimize the spread of contaminated tumbleweeds, sprayed herbicides to control growth, rad-rover tractor contracted to perform extensive survey to determine extent of conditions.
 - 218-E-12B Trench 94 Received and placed the Navy Reactor Compartment ex-USS Triton #1 (non-PBS funded)

RL-0030 Soil and Groundwater Remediation

30.01 Integration and Assessment

Base

Environmental Strategic Planning

The Central Plateau Cleanup Strategy was shared with the Oregon Hanford Cleanup Board and the HAB River and Plateau Committee in early October. The strategy was also discussed with the HAB committee as a whole October 29, 2009. The meeting was well attended and provided a good dialogue opportunity for all parties. The Change Packages that incorporate the Central Plateau Cleanup Strategy into the Tri-Party Agreement have been drafted and provided to regulatory agencies for comment.

Document Review & Standardization

The RD/RA Work Plan, RACR, and O&M Plan annotated outlines have been sent to the regulatory agencies and are awaiting comments. The ROD, ALARACT, Notice of Construction, Air Monitoring Plan, Removal Action Work Plan, and DQO Summary reports have been sent to DOE and are awaiting acceptance.

Risk and Modeling Integration Group

Several meetings were held with RL on Risk Integration issues, including a number of specific meetings on the Outer Area schedule and risk approach, and the path forward for non-operational areas. The Risk Integration Process Document was reviewed by the Risk Integration Core team to discuss comments and proposed path forward.



Environmental Database Management

The Waste Information Data System (WIDS) Redesign Committee continues to collect input for changes, modifications and/or updates to WIDS. A "bug" was resolved in the Well Maintenance Application (WMA), dealing with a field not updating and resulting in incorrect information being printed out on task orders.

30.03 Well Drilling and Decommissioning

ARRA

- Initiated drilling for 171 wells at 100-NR-2; drilling 12 and completed five
- Continued drilling on the last of six 200-ZP-1 extraction wells; five wells are at total depth with two completed
- Initiated drilling the 35 RPO wells at 100-HR-3 (H area); 12 wells are complete
- Initiated drilling two of four wells at 100-BC-5
- Initiated drilling 14 wells at 100-HR-3 (D Area); two wells are complete

Base

- Completed construction and development of all three wells at 200-ZP-1
- Completed three of five wells at 100-KR-4

River Corridor

30.10 100-BC-5 Operable Unit

ARRA

Drilling of two of the BC-5 four wells (C7505 and C7506) continued, with C7505 advanced to approximately 130 feet below ground surface (ft bgs) and C7506 to approximately 132 ft bgs.

Base

In response to the preliminary WCH river-pore sampling results, an additional expedited well-sampling event was completed for three existing wells along the river, and the BC aquifer tube sampling campaign was completed ahead of schedule. Additionally, one of the planned four-well drilling locations was moved from near the C Reactor to a location near the river (planned well C7508 replaced by C7665). This change was approved in a TPA Change Notice (TPA-CN-303) to modify the four-well sampling analysis plan (SAP) (DOE/RL-2009-61).

30.11 100-KR-4 Operable Unit

Base

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

- Approximately 4.1 million gallons pumped at the KR4 pump and treat system
- Approximately 12.6 million gallons pumped at the KX system
- Approximately 8.6 million gallons pumped at the KW system

The KR4 system and portions of the KX system remain under construction related to Phase 2 realignment. Flows through both systems were reduced during October pending completion of Phase 2 construction work, which was on hold as a result of the September 25, 2009, lock and tag issue. The hold on non-electrical construction work was lifted at month's end, allowing Phase 2 work to restart. Three of the five new wells associated with Phase 2 have been accepted from the drilling contractor, and drilling of the final two wells is pending completion of cultural reviews to support the excavation permit.



Remedial Process Optimization evaluations resulted in recommendations for implementation of a phased approach to meeting the TPA target dates for remediation of the Chromium 6 plume in 100-KR-4. The recommendations were provided to RL in mid-September. The RPO technical memorandum is being readied for RL review.

Revision 2 of the KW RDR/RAWP (addressing the KW facility expansion to 200 gpm treatment capacity) was cleared and released. The 100-KR-4 Interim Action Monitoring Plan underwent final technical editing in preparation for RL review. The sampling and analysis plan (SAP) from the K Decision Unit Addendum to the 100 Areas Remedial Investigation/Feasibility Study (RI/FS) Workplan was approved by RL and EPA, and Rev. 0 issued. The first quarter of risk assessment sampling guided by this SAP was initiated. Staking of the K Area RI wells continued.

30.12 100-NR-2 Operable Unit

ARRA

Drilling of the multipurpose wells (barrier wells) began in early October using sonic drilling methods. Eleven wells were drilled and completed with one of those being continuously sampled for evaluation of the existing Apatite Permeable Reactive Barrier (PRB).

Base

The 100-N Eco Risk Document (Revision 1) was transmitted to RL early on October 5, 2009; awaiting RL approval of the document.

Field activities for the Jet Injection Treatability Test are expected to begin in early to mid-November. All contractual submittals have been received and approved, including RL and Ecology approval of the contractor's Injection Plan. Mobilization is expected to begin on November 4, 2009, and the project kickoff meeting is tentatively scheduled for Monday, November 9, 2009.

The Draft A Proposed Plan for amending the Interim Record of Decision was transmitted to RL on September 30, 2009 (supporting TPA milestone #M-16-14B, due 12/30/2009); awaiting RL approval of the document and subsequent RL submittal to Ecology for review.

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

Decisional Draft A of the 100-N Decision Unit Work Plan Addendum was delivered to RL for review on September 14, 2009, and the associated SAP was delivered to RL for review on September 15, 2009. RL comments were requested to be returned by October 9, 2009. Initial RL comments were received. Groundwater information needs to be better addressed. The document team has assembled new members and is working with technical leads to actively address RL concerns. Meetings were held to update RL on the document revision progress. The Draft A documents are expected to be submitted to RL by November 30, 2009 (supporting TPA milestone #M-015-61, due 12/31/09).

Engineering design was initiated for an injection system for the Apatite Barrier expansion. A 30% design-review meeting is scheduled for November 19, 2009. Additional planning activities are underway.

Phytoremediation and TPH studies are continuing with PNNL as planned. The phytoremediation biomass has been harvested, and the TPH data-collection work is essentially complete.



30.12 100-HR-3 Operable Unit

ARRA

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

- Approximately 3.3 million gallons pumped at 100-HR-3
- Approximately 1.1 million gallons pumped at 100-DR-5

HR-3 operated at below-normal levels as part of the H Area Aquifer Test, in which three H Area wells are being pumped from the Ringold Upper Mud (RUM) to investigate communication between the RUM and the unconfined aquifer. The test commenced August 18, and in September a 24-hour step test was performed and a constant rate pump test started. Flow to HR-3 from the D Area has been throttled to about 1/3 normal for the constant rate test.

DR-5 also operated at below normal flows because two of the extraction wells, 199-D5-20 and -32, were out of service. They had been disconnected in support of the D Area hot spot pumping when construction was suspended for October as a result of the K Area Lockout/Tagout (LOTO) incident. Construction has now resumed and the well realignment will proceed.

The DX design team is completing the 90% design of the DX pump and treat, with the formal 90% design review planned for early November. DX which will have an operational capacity of 600 gpm with completion of ATP by 12/31/2010 in order to achieve the TPA and PBI for a total operational capacity of 500 gpm across the HR-3 OU. DX and HX systems together provide 1,300 gpm new treatment capacity versus the 1,000 gpm capacity used in the modeling. Ion exchange vessels for both systems are designed to operate on either Purolite A500 or ResinTech SIR-700 resins. BCRs documenting these changes are in preparation.

DX construction started in July with road crossings, yard piping and well rack fabrication. The contractor for the buildings had poured the process building floor slab by the end of September. Initial well drilling was completed in H Area (12 wells), where well locations were outside culturally sensitive areas, and started in D Area (three wells). A Cultural Resource review report for new well locations in culturally sensitive areas was reviewed by the State Historic Preservation Officer (SHPO) and the tribal nations.

Base

The third series of resin tests at DR-5 continued with ResinTech SIR-700 still removing Chromium 6 since the first series started on March 10, 2009 (over 45,000 bed volumes through October). The spent resin toxicity characteristic leaching procedure (TCLP) test has shown spent SIR-700 to be a dangerous waste, so that stabilization will be required before disposal.

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

The RI/FS Work Plan and Addendum 1 have been reviewed by regulators. Comment resolution is nearing completion on the Work Plan and Addendum 1, and SAP comments will be complete in November. A mini-SAP was approved, allowing risk assessment sampling for the RI (planned for October) to proceed.



30.14 100-FR-3 Operable Unit

Base

Draft A of the 100-F & IU-2/6 Decision Unit Work Plan Addendum and SAP were transmitted to RL on August 31, 2009. The documents were subsequently submitted by RL to EPA on September 25, 2009 (meeting TPA milestone #M-015-63, due 9/30/09). Documents are currently under EPA review, and final comments are expected to be received by November 25, 2009.

Central Plateau

30.20 200-BP-5 Operable Unit

Base

K well C5860 (299-E29-54):

Initiated planning for the depth discrete groundwater sampling task which is expected to start early November. Drilling of the K well C5860 (216-B-6) and L well C7514 (216-C-1) scheduled to start in early November.

Completed the review of the draft Conceptual Model Report for the B-BX-BY. Initiated work on the 200-BP-5 RI Report. A data quality assessment (DQA) of groundwater data is underway in support of the RI Report. Initiated work on the 200-BP-5 DQO in support of the 200-BP-5 Treatability Test Plan.

30.21 200-PO-1 Operable Unit

Base

Continued work on the draft remedial investigation (RI) report. An internal draft of the report has been completed with the exception of the contaminant transport modeling results.

30.22 200-UP-1 Operable Unit

Base

The Draft A of Revision 3 to the 200-UP-1 OU Groundwater Remedial Design/Remedial Action Work Plan (DOE/RL-97-36, Rev. 3) is currently under regulator review. Ecology requested a 30-day review extension with a new submittal date of November 2, 2009. No comments have been received to date.

A memo-to-file was provided to RL to correct language in the interim 200-UP-1 ROD indicating that carbon tetrachloride is not an F001 listed waste but instead is a dangerous waste. A DOE briefing on the memo-to-file has been scheduled for November 5, 2009.

Preparation of the draft 200-UP-1 OU remedial investigation/feasibility study (RI/FS) report continues.

The U Plant pump and treat system has been shutdown since October 15, 2009 due to an ETF outage, which is expected to last for at least 5 weeks.

30.23 200-ZP-1 Operable Unit

ARRA

Depth-discrete groundwater samples are currently being collected and analyzed during the drilling of six new extraction wells C7024 (EW-4), C7027 (EW-5), C7026 (EW-8), C7494 (EW-15), C7028 (EW-18), and C7029 (EW-19). Wells C7024 (EW-4), C7027 (EW-5), C7494 (EW-15), C7028 (EW-18), and C7029 (EW-19) are at total depth. Performed WSCF analyses on depth-discrete groundwater samples collected from these wells. Continued merging of the Performance Monitoring Plan and the RCRA/CERCLA/AEA Integrated Monitoring Plan.



Base

Ten of 14 groundwater extraction wells are currently online pumping water at a rate of approximately 235 gpm. Extraction well 299-W15-44 is off line as it will be replaced by new extraction well C7017 (EW-1). Three other extraction wells are offline due to some minor technical difficulties that were repaired. Now that the electrical stand down is over, work to get these extraction wells back on line is currently being scheduled. Approximately 9.7 million gallons of groundwater were treated in October.

Two extraction wells in the vicinity of the T Tank Farm continue to pump water to the Effluent Treatment Facility at a rate of approximately 45 gpm. The groundwater modeling analysis report (DOE/RL-2009-38, Rev. 0) supporting the RD/RA Work Plan was issued during this reporting period after the MODFLOW model was validated.

Continued working on the 90% design for the 200-West Area Groundwater Treatment Facility. The SAP supporting the installation of next 11 extraction/injection wells has been revised based on RL and EPA comments.

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

Base

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

30.30 300 FF-5 Operable Unit

Base

The RI/FS Work Plan and SAP Draft A have been delivered to EPA on October 22, 2009, meeting the TPA milestone M-15-71.

The construction of an infiltration gallery to support treatability testing of remedial technologies was completed the week of September 28, 2009. Geophysical testing will continue prior to initiation of infiltration testing during low river stage anticipated to be in February or March of 2010.

30.31 Regulatory Decisions and Integration

ARRA

- Issued revised Waste Management Plan for the K, L, and M wells.
- Developed PUREX EE/CA remedial action objectives
- Completed draft geophysical investigations report for four 200-SW-2 landfills
- Completed laboratory analyses for 200-SW-2 passive organic vapor sampling at approximately 350 locations in 200-East/West area landfills
- Held a second comment resolution meeting with EPA and Ecology on the 200-UW-1 Remedial Action Goals document.
- Transmitted 200-MG-1 Action Memorandum (Decision Draft) for 37 remaining waste sites in the outer area to RL for review and comments
- Transmitted 200-MG-2 OU Action Memorandum, Rev. 0, for RL approval and transmittal to EPA for their concurrence

Base

- Transmitted the Decisional Draft for the 200-MW-1 FS and PP (Decisional Draft) to RL for review and comment
- Issued the 200-BC-1 DQA Report



- Issued Draft A 200-BC-1 Treatability Test Report to Agencies for review
- Completed Burial Ground sampling and analyses Report for July September 2009 (two months ahead of schedule) in support of TPA milestone M-91-40, Requirement 2

30.32 Deep Vadose Zone Treatability Test Project

Base

- Deep Vadose Desiccation Pilot Test: Pilot Test activities for Desiccation are underway with the primary focus on establishing a contract for drilling of 20 boreholes needed for instrumenting and logging for the Pilot Test. The RFP for these boreholes should be issued this month. A Statement of Work is also in development that will be used to contract the procurement of a dry air delivery system for the project. Additionally, a contract has been released to the MSA contractor for design and construct of a 13.8 KV power supply needed to operate the three phase 480 volt equipment used in the Pilot Test.
- The Characterization Test Report has been drafted and will undergo technical editing the week of November 2, 2009. This test report is anticipated to be transmitted to RL in December of 2009 and satisfies a performance incentive goal due January 30, 2010.
- Desiccation Lab Testing: Additional testing will be performed in FY 2011 that will investigate rewetting as a result of recharge and water vapor transport and will be used to model long term affects of re-wetting desiccated soils.
- Uranium Sequestration Testing: PNNL has drafted the test report on Uranium Sequestration and the document is now in tech editing. This report will be included in a related TPA milestone due on January 31, 2010. Additional testing has been selected to be performed in FY 2010 to support a large scale field test to be performed in FY 2011.
- Soil Flushing: PNNL continues to prepare a Test Plan to evaluate soil flushing as a mechanism to contact targeted contamination in the vadose zone with a leaching solution. The laboratory will be performing these tests to evaluate kinetics and stability of solubilization of Tc-99 and uranium, transport properties of the solubilized Tc-99 and uranium, and impact of vadose zone sediment properties on leaching solution processes. Additional modeling will also be performed to assess distribution, location, and stratigraphic factors that control the distribution of vadose contaminants and movement of injected fluids.

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

ARRA

- U Plant Regional Closure Zone (U Ancillary Facilities D&D)
 - o Continued demolition preparation activities in 224U and 224UA
 - o Continued asbestos abatement activities in 224U and 224UA
- 212N/P/R Buildings D&D
 - o Completed demolition of 212N
 - o Continued demolition of 212R and 212P
- 200-CW-3 Waste Sites Sampling
 - o Statement of work for the first Remove, Treat and Dispose (RTD) site has been prepared
- ALE D&D
 - o Continued placement of support trailers
 - o Continued waste characterization and Cold and Dark activities
 - o Began mobilization activities to support D&D activities
- BCCA Waste Site Remediation



- o The mobilization for the BCCA excavation started in August and is in process concurrent with the start of remediation
- o Remediation using "super dump" trucks was initiated with approximately 3,600 tons of soil removed and transferred to ERDF
- o The radiological helicopter survey was completed. Results are anticipated by mid-November
- Model Group 1 (MG-1)
 - The response Action Completion Report (RACR) for 200-E-110 and 600-21is in CHPRC review
 - o Analysis of sampling data for 600-36 is complete indicating RTD is required
 - o Analysis of sampling data for 600-41 indicates RTD is not required
 - o The Removal Action Work Plan (RAWP) review continues in regulator arena. Forecast date for review by regulator may impact start of RTD activities.
 - o The Action Memorandum for the remaining 23 sites has been prepared and will be transmitted to DOE for initial review
 - o Continued Baseline Hazard Assessment of East Power House building 284E

Base

- U Canyon Cell 30
 - Packaged samples taken from Tank D-10 shipped to lab for analysis, and characterization report issued
- S&M
 - o Continued job site preparations for the B Plant HEPA and pre-filter change out
 - o Continued B Plant annual fan maintenance

RL-0041 Nuclear Facility D&D, River Corridor

41.02 RC PRC River Zone Environmental

ARRA

- Completed demolition of the 118KE Rod Cave
- Continued design of 105KE Reactor Disposition
- Continued characterization of 105KE Reactor Disposition
- Continued characterization of 183.1KW, 183.3KW, 183.7KW, 115KE, 116KE, and 117KE
- Completed characterization of 183.2KW
- Continued cold and dark at 115KE, 116KE, 117KE, and 183.7KW
- Completed cold and dark at 183.2KW, 183.3KW, and 183.1KW
- Pending approval to resume work in UPR-100-K-1, remediation resumed on 100-K-56 and preparatory activities on 100-K-47 and 100-K-3 pipelines were initiated. 100-K-56 is a 72-inch diameter primary effluent pipeline consisting of multiple pipes that drained various facilities or areas and dumped directly into the outfall or retention basis. 100-K-3 pipeline mixed water to simulate outfall conditions in the river in support of laboratory studies for the effects on fish of radiologically contaminated water discharges into the Columbia River.

Base

- Finished demolition loadout of 1706KE/1706KEL/1706KER facilities
- Completed installation of the permanent Container Transfer Area
- Completed UPR-100-K-1 confirmatory sampling



MAJOR ISSUES

RL-0011 Nuclear Materials Stabilization and Disposition of PFP

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

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

Status - For the cooling upgrade, functional requirements have been approved, and statements of work and related technical specifications for the major contracts were nearly ready for final review and approval at the end of the reporting period. A sufficient number of newer CAMS have been ordered and received, and the older units are being replaced as needed.

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

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

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

Issue Statement - Late in August, technical issues with the application of the Surface-contaminated object (SCO) process to several glove boxes were identified and are being evaluated.

Status - Six glove boxes previously removed and destined for ERDF disposal have been put on hold pending a technical evaluation. The SCO survey process and nondestructive assay measurements continue to be used for other glove boxes in the facility where applicable.

RL-0013 Waste and Fuels Management Project

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

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

Status - Options have been developed, the preferred option(s) has been selected and the priority has been established. The recovery schedule has been completed. Completing interim actions to stabilize boxes expected to complete Spring of 2010.



report on this issue.

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

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

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

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

Issue Statement - The progress of the demolition of 212-P and 212-R is being impacted by the lack of ERDF containers being delivered to the project. Due to other higher site priorities, ERDF is not able to produce the necessary containers for the project.

Corrective Action - Additional ERDF containers will be purchased and the use of overtime by both ERDF and the Project will be necessary to finish the demolition by the middle of November. **Status -** Additional ERDF containers were purchased, CHPRC ready to serve shipping was implemented, and overtime utilized. Demolition and loadout of 212N, P&R are complete. This is the last

RL-0040 Outer Zone Waste Site Remediation

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

Corrective Action - CHPRC is working closely with MSA on priorities and procurement of equipment. CHPRC is preparing a business case to self perform equipment procurement.

Status - This is the first report on this issue.

RL-0041 Nuclear Facility D&D, River Corridor

Issue Statement - CHPRC received correspondence from RL on October 14, 2009, requesting a proposal / estimate for removal of the K East and K West Reactor Cores. Additionally, the proposal will include the movement of the K East Reactor Core removal ARRA work scope to Base funding, with equivalent movement of Base activities to ARRA. These actions were originally due on November 9 and 23, 2009, respectively.

Corrective Action - RL had communicated these actions to CHPRC prior to issuance of the letter request on October 14, 2009, and additionally, the Project has been supporting their Assistant Manager in development of a presentation to gain full project approval. The Project will submit the proposal and estimate as requested.

Status - The Project has assigned a Project Manager and the team has continued the estimating effort. Concurrently, the Project is reviewing the sequencing of facility and waste site demolition / remediation to optimize the near-term removal of not only the K East Reactor Core, but initiation of K West Reactor Core removal preparations as well. The project briefed RL on November 9, 2009, and provided the draft proposal. The project continues to work with RL to determine the appropriate path forward.



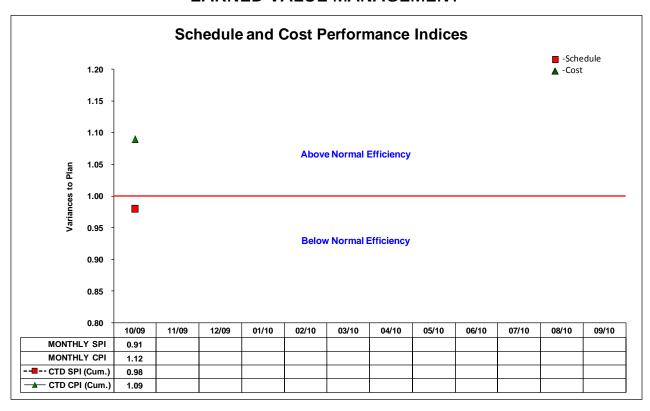
Issue Statement - Due to contamination levels in the soil associated with UPR-100-K-1, overall waste quantities will exceed the original project assumptions and waste shipping requirements are restricting quantities in the container to approximately one-half of their available capacity. This issue combined with restriction to 15 containers per day has the project progressing at approximately 20% of their planed rate.

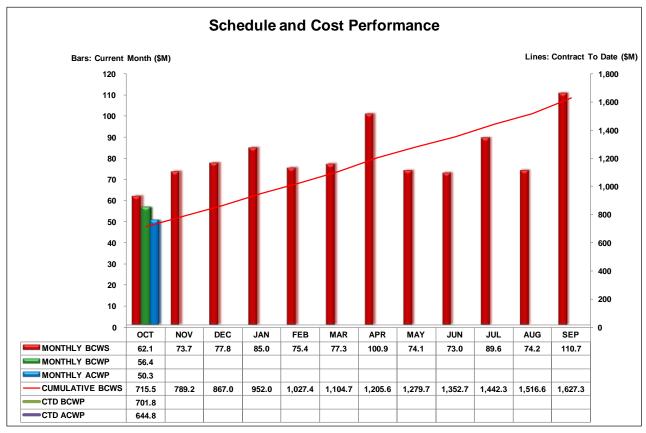
Corrective Action - Special packaging instructions have been prepared for the varied levels of material that the project is encountering and additional containers will be requested once the project has resumed. A BCR will be prepared to address the realized risk (KBC-004) that contamination depth is greater than planned and waste volumes are increasing to ERDF. A recovery plan will be prepared to analyze how much of the existing variance can be improved.

Status - Special packaging instructions have been completed and approved by RL. A calibrated scale is in place, which is the last action to resume remediation activities. The BCR and recovery plan are under development.



EARNED VALUE MANAGEMENT







Performance Analysis – October

ARRA Performance by PBS (\$M)

	Current Period							
	Budget	ed Cost	Actual Cost	Variar	nce			
	BCWS	BCWP	ACWP	Schedule	Cost			
RL-0011 - PFP D&D	7.4	5.9	5.7	(1.5)	0.2			
RL-0013 - MLLW Treatment	3.8	2.6	1.5	(1.2)	1.1			
RL-0013 - TRU Waste	5.4	5.0	4.2	(0.3)	0.8			
RL-0030 - Soil and Groundwater	4.7	5.9	4.8	1.2	1.1			
RL-0040 - U Plant/Other D&D	4.7	6.5	3.7	1.8	2.9			
RL-0040 - Outer Zone D&D	4.0	2.7	1.0	(1.3)	1.7			
RL-0041 - 100K Area Remeditation	6.7	5.3	3.4	(1.4)	1.9			
Subtotal	36.7	33.9	24.3	(2.8)	9.6			

ARRA

The unfavorable Schedule Variance (-\$2.8M/-7.6%) reflects:

- The RL-0013 negative variance (-\$1.5M) is primarily attributable to delays in ERDF hiring, equipment purchases, and maintenance facility activities; delay in TRU Retrieval activities due to container degradation; partially offset by early shipment of FY 2010 MLLW.
- The RL-0011 negative variance (-\$1.5M) is associated with delay in field work team qualification and preparation of various documents that must precede the field work (criticality safety, engineering, and work planning). This delay has affected D&D work in 234-5Z (\$422K), PPSL/Standards Lab (\$138K), and Balance of 234-5Z (\$305). In addition, the extended durations for chemical decontamination of glove boxes HC-230-C-3 and HA-20MB (\$269K), high dose rates encountered in the 234-5Z Lab Room 139 work (\$210K), and delays in several planned facility modifications, including establishing more efficient waste routes and relocation of the PFP tool crib out of the 234-5Z (\$171K) are contributing to this negative variance.
- The RL-0041 negative variance (-\$1.4M) is due to delayed start of facility demolitions while D4 crews completed work on K East Basin and 1706 Facility Complex removals; delays in K West Basin Ventilation modification specifications and ordering of related materials; delays in Utility Reroute on ordering materials until review and approval of design specifications; allowed progress in K East Core Removal engineering and regulatory activities to accommodate reviews and decisions on project path-forward; non-receipt of Capital Equipment ordered in prior months; slower than planned start in Waste Site Remediation caused by delayed finish of K East Basin removal. Work scope will be performed in FY 2010 with expectation to recover delays, with the exception of the K East Core Removal, which will be re-planned once overall strategy is reviewed and approved by RL/DOE-HQ. The negative variances are partially offset by a favorable variance in KW Basin Debris Removal project. The personnel assigned to the project are experienced in debris removal activities, but the baseline assumed a learning curve.



- The primary contributors to the RL-0030 positive variance (+\$1.2M) that exceed the reporting thresholds are:
 - (+\$1.3M) Acceleration of procurement and construction activities for DX for 100-HR-3
 Operable Unit. These activities were planned to begin in February 2010.
 - o (-\$0.5M) Delays in 200W Area Pump-and-Treat road crossing construction. Originally the delays were associated with changing well location which impacted BOP design and material procurement. In addition, the excavation permit and AJHA took longer than planned due to changes/implementation of internal procedures affecting AJHA. Materials have been ordered and received for 60% of the crossings and construction starting the week of November 2. The impact associated with BOP road crossing construction delays is also considered minimal. This scope is not on the critical path and is expected to progress fairly rapidly once started.
- The RL-0040 positive variance (+\$0.5M) reflects:
 - o U-Plant/Other (+\$1.8M) attributed to the arrival of two compact wheel loaders originally scheduled for September delivery and for receipt of two water trucks that were received in September for which credit was not taken.
 - Outer Zone (-\$1.3M) due to: 1) delays in starting remediation of waste site 216-N-1 as a result of changing processes for release of work to Fluor Federal Services construction forces for which the Task Charging Authorization has been issued and field work is expected to be initiated in November, and 2) the limited rate of progress on BC Control Area due to the number of super dump trucks (three), weather, and initial adjustments being made in contractor and ERDF processes.

The favorable Cost Variance (+\$9.6M/+28.3%) reflects:

- The RL-0040 (+\$4.5M) positive variance is due to several areas: Cost of several D&D Capital Equipment procurements are well below the planned budget, U Canyon mobilization and canyon deck are still under staffed although good process is being made, ERDF and sample analysis billings for O-Zone Waste Sites have been delayed, and both Cold and Dark and WIF are well below their planned budget.
- RL-0013 (+\$1.9M) positive variance is primarily due to missed accruals for 435.1 Compliance waste disposal activities, efficiencies in TRU repackaging activities, and continued charges to Base-funded elements which shifted to ARRA funding in FY 2010.
- RL-0041 (+\$1.9M) positive variance is due to continued overall trend of above average efficiency in work performance achieved, with the main contributors being facility characterization in preparation for D4; and the K West deactivation debris removal campaign.
- The primary contributors to the positive variance in RL-0030 (+\$1.1M) that exceed the reporting thresholds are:
 - o (+\$0.4M) Efficiencies obtained in well drilling for ZP-1, NR-2, and HR-3 during October. Cost efficiencies are being obtained through an aggressive drilling schedule with savings in support personnel, faster drilling methods, and the fact that the HR-3 wells depths have been less than originally planned. Many of these efficiencies are planned to continue resulting in additional positive cost variance.
 - o (+\$0.4M) Efficiencies realized in the CW-1 ponds characterization by combining with the Gable Pond characterization, as well as, efficiencies in the landfill characterization activities. These activities will be addressed in the PMB Rev2 baseline updates as part of the RL RCR comment resolution/incorporation and the positive cost variance will be reduced.
- RL-0011 (+\$0.2M) positive variance is within reporting threshold.



Base Performance by PBS (\$M)

	Current Period							
			Actual					
	Budget	ed Cost	Cost	Varia	nce			
	BCWS	BCWP	ACWP	Schedule	Cost			
RL-0011 - Nuclear Mat Stab & Disp PFP	3.2	2.5	3.9	(0.7)	(1.4)			
RL-0012 - SNF Stabilization & Disp	4.7	4.1	4.8	(0.6)	(0.7)			
RL-0013 - Solid Waste Stab & Disp	6.5	6.0	7.5	(0.5)	(1.5)			
RL-0030 - Soil &Water Rem-Grndwtr/Vadose	8.5	7.6	6.8	(1.0)	0.7			
RL-0040 - Nuc Fac D&D - Remainder Hanfrd	1.7	1.1	1.4	(0.7)	(0.3)			
RL-0041 - Nuc Fac D&D - RC Closure Proj	0.5	1.1	1.5	0.5	(0.5)			
RL-0042 - Nuc Fac D&D - FFTF Proj	0.1	0.1	0.0	0.0	0.1			
Total	25.4	22.5	26.0	(2.9)	(3.5)			

The unfavorable Schedule Variance (-\$2.9M/-11.4%) reflects:

- Various positive and negative schedule variances that did not exceed the threshold contributed to the RL-0030 (-\$1.0M) negative variance. The following negative variances exceeded the threshold:
 - o 100-KR-4 OU (-\$0.6M) is due to: a) Field planning /investigations were delayed due to lack of resources to perform well siting activities. Lab analysis/data evaluation work will be delayed until January but sufficient float is available and the report will be finished on time, b) Equipment/material installation for Phase 2 Well realignment was delayed due to lock-out/tag-out issues. Work is expected to finish on schedule, and c) Bioremediation Test Plan and Test completion delayed due to ongoing remedial process optimization (RPO) evaluations. This schedule variance will continue until RL accepts the RPO recommendations and the work effort is re-planned.
- RL-0011 (-\$0.7M) negative variance is associated with work in the 236-Z (PRF) facility. Electrical issues on the PRF canyon crane identified during reactivation entries have led to more entries than originally planned. Delay in field work team qualification, along with decontamination of contaminated glove and port ring have impacted the ability to complete the West Gallery glove box internal cleanout. The delay in field work team availability has diverted fifty percent of the gallery glove box team's time to support canyon entries. In addition, a management decision was made to perform two weeks of dress/undress training for all PFP D&D field work teams. This will mitigate risk exposure ALARA in high risk areas and minimize the potential for spread of contamination. In addition, a three to four week delay has been experienced in PRF due to development of a modified approach to removal of pencil tanks from the facility.
- The RL-0040 (-\$0.7M) negative variance is due to the late start of the Cell 30 design. A decision by RL and the Regulators is expected in early November as to a plausible disposition path forward for Cell 30.
- RL-0012 (-\$0.6M) negative variance is primarily found in the STP negative variance due to: 1) additional testing at PNNL, requested by engineering, to understand the settling times of the sludge



(with and without flocculant) for the loading/decanting of the STSCs, which has delayed the characterization report on the KE sludge (SCSs 240, 250 and 260) and KW sludge from SCSs 210 (-\$0.3M). 2) the BCWS for the KOP workscope that was completed in FY 2009 is now catching up, creating a negative schedule variance in both the KOP Phase 4 activities and the KOP design activities (-\$0.3M). 3) late start of the refurbishment of the MCO processing systems as planned, as STP and 100K Operations are reviewing all systems to ensure that CHPRC prudently make these investments (-\$0.2M). 4) offset by the positive schedule variance for the installation and initiation of Construction Acceptance Test (CATs) for the Settler Tank Retrieval systems (+\$0.2M). (Note: during the Pump skid CAT, the Settler Tank Retrieval Pump failed.)

- The RL-0013 (-\$0.5M) negative variance is within reporting threshold; however, it is primarily due to continued delays in Next Generation TRU Retrieval procurements partially offset by the returns of FY 2009 legacy LLW from treatment facilities.
- RL-0041 (+0.5M) positive variance reflects progress on mobilization of the waste site remediation subcontractor and UPR-100-K-1 confirmatory sampling that was planned in previous months.
- RL-0042 (\$0.0M) variance is within reporting thresholds.

The unfavorable Cost Variance (-\$3.5M/-15.7%) reflects:

- RL-0013 (-\$1.5M) negative variance is primarily attributable to a data input error which allocated
 material purchases for multiple projects to WFMP (will be corrected in November), increased
 allocation or G&A/Direct Distributables, and continued charges to Base-funded elements which
 shifted to ARRA funding in FY 2010.
- RL-0011 (-\$1.4M) negative variance is a result of extra entries being made to reactivate the canyon crane as a result of electrical deficiencies found during investigations, use of overtime to try and recover schedule for the West Gallery glove box cleanout, and delay in field work team qualification to begin work on the East Gallery glove box cleanout on October 1, 2009. In addition, overrun of labor to support the min-safe activities at PFP is caused primarily due to erroneously omitted budget from the FY 2010 baseline which will be corrected in the submittal of CHPRC Performance Measurement Baseline, Revision 2 in December, 2009. Application of G&A and Direct Distributables are also contributing to this variance.
- RL-0012 (-\$0.7M) negative variance is due to variances in: a) Due to K Basins Operations personnel are staffed and budgeted as "ready to serve" KW operations activities and STP in-basin activities. These resources were underutilized by STP. Additionally, labor for cold and dark isolation of facilities was erroneously charged to 100K Facility Operations and support. Time cards will be corrected and re-submitted, b) Due to: 1) The additional STP settling tests at PNNL, along with a failed test which required some re-work (-\$0.2M), 2) KOP systems refurbishment did not start as scheduled as STP and 100K Operations personnel are still performing systems evaluation.
- The RL-0041 (-\$0.5M) negative variance is within established reporting thresholds.
- The variances in RL-0040 and RL-0042 are within reporting thresholds (-\$0.2M).
- Various positive and negative cost variances that did not exceed thresholds contributed to the positive cost variance in RL-0030 (+\$0.7M) which is within reporting thresholds. Variances that did exceed thresholds are as follows:
 - o 100-NR-2 OU (+\$0.4M) Chemical treatment, maintenance, and reporting efficiencies were obtained during the month and are expected to result in continued underruns.
 - o 100-HR-3 Operable Unit (-\$0.5M) Due to extension of the design effort due to change of resins which required modification of Ion Exchange (IX) trains. The overrun in design activities will continue and the project is evaluating potential funding sources through funds management.



Performance Analysis - Contract to Date

ARRA Performance by PBS (\$M)

		Со	ntract to D	ate		C	ontract Pe	riod
			Actual					
		ed Cost	Cost	Varia			,	
	BCWS	BCWP	ACWP	Schedule	Cost	BAC	EAC	Variance
RL-0011 - PFP D&D	54.3	52.0	42.4	(2.3)	9.6	256.9	263.7	(6.7)
RL-0013 - MLLW Treatment	10.8	10.4	7.8	(0.4)	2.6	53.0	49.5	3.5
RL-0013 - TRU Waste	22.2	21.5	23.4	(0.7)	(1.9)	188.2	213.1	(24.8)
RL-0030 - Soil and Groundwater	13.3	18.3	14.5	5.0	3.7	208.1	214.1	(6.0)
RL-0040 - U Plant/Other D&D	51.5	52.4	39.8	0.9	12.6	216.2	197.5	18.7
RL-0040 - Outer Zone D&D	10.2	7.3	3.8	(3.0)	3.5	79.0	78.7	0.3
RL-0041 - 100K Area Remeditation	36.0	29.0	18.3	(7.0)	10.7	192.0	169.8	22.3
Subtotal	198.2	190.8	150.0	(7.5)	40.8	1,193.4	1,186.3	7.1
Management Reserve						19.8		
Fee						98.7	_	
Total						1,311.9		

The unfavorable CTD Schedule Variance (-\$7.5M/-3.8%) reflects:

- RL-0041 (-\$7.0M) negative variance is due to delays in completing specifications for ventilation modifications and utility reroutes, and ordering of associated materials; and the directed slowdown in K East Core Removal engineering and regulatory activities pending a review of the overall project strategy at RL/DOE-HQ.
- RL-0011 (-\$2.3M) negative variances are associated with delay in field work team qualification and preparation of various documents that must precede the field work (criticality safety, engineering, and work planning). This delay has affected D&D work in 234-5Z (\$422K), PPSL/Standards Lab (\$138K), and Balance of 234-5Z (\$305). In addition, delays in procurement of several large pieces of equipment (\$139K), delays in several planned facility modifications, including establishing more efficient waste routes and relocation of the PFP tool crib out of the 234-5Z, modifications to PRF (elevator), and removal of the Liquid Nitrogen Storage Pad (\$594K), and late delivery of the PFP Decontamination Trailer (\$216K) are contributing to this negative variance.
- RL-0040 (-\$2.1M) is within reporting thresholds, although the negative variance is being caused by delays at 212N, 212P and 212R are a result of significant increases in the basin floor thickness that has required additional ERDF cans. ERDF has not been able to produce the necessary containers to support the project in a timely manner; slower than planned ramp-up of personnel for the U-Canyon Project which caused mobilization and ramp-up activities to fall behind; slow start up at the BC Control area remediation and 216-N-1 Waste Site; partially offset by the early procurement of D&D capital equipment.
- RL-0013 (-\$1.0M) negative variance is primarily due to delays in ERDF hiring & procurements coupled with delays in TRU Retrieval activities caused by the discovery of significantly deteriorated boxes, the inability to make progress while resolving the 85-gallon Overpack issues, a respirator



- failure and associated recovery actions, and weather impacts. This is partially offset by the acceleration of FY 2010 MLLW treatment and TRU Repackaging activities.
- RL-0030 (+\$5.0M) primary contributor to the positive variance is in the 100-HR-3 Operable Unit where procurement and construction activities have been accelerated. These activities were planned to begin in February 2010.

The positive CTD Cost Variance (+\$40.8M/+21.4%) reflects:

- RL-0040 (+\$16.0M) positive variance is largely due to slow ramp up and full implementation of the cold and dark teams and the sampling and characterization (WIF) teams; G&A and Direct Distributable allocations; slow ramp up of staff and subcontractors for the Outer Zone waste sites; efficiencies in demolition and sampling activities, particularly at 212-N, -P and -R, and 200-CW-3 waste sites; slow ramp-up and recognized efficiencies at U-Canyon; offset by increased material and equipment costs, increased use of masks and respirators due to the unexpected asbestos levels in the ancillary buildings in U-Ancillary, coupled with increased insulator staff and overtime to recover schedule.
- RL-0041 (+\$10.7M) positive variance is due to above average efficiency in work performance achieved, with the main contributors being: Facility characterization in preparation for D4; and K West Deactivation debris removal campaign.
- RL-0011 (+\$9.6M) positive variance is associated with under runs caused by late hiring of ARRA funded staff (\$384K), overstatement of resources for cross-cutting support (\$3.7M), delay in completion of facility modifications (\$420K), delayed procurement of waste containers (\$400K), overstatement of 222S lab sampling support (\$146K), delay in receiving costs associated with waste disposition (\$1.1M), delayed receipt of Decontamination Trailer (\$559K), and allocation of G&A (\$2.9M).
- Various positive and negative variances contributed to the positive variance in RL-0030 (+\$3.7M) are as follows:
 - o (+\$0.8M) Efficiencies obtained in well drilling for ZP-1, NR-2, and HR-3 during October. Cost efficiencies are being obtained through an aggressive drilling schedule with savings in support personnel, faster drilling methods, and the fact that the HR-3 wells depths have been less than originally planned. Efficiencies for ZP-1, NR-2, and HR-3 are expected to continue resulting in additional positive cost variance. However, the positive cost variance achieved in FY 2009 in FF-5 well drilling activities is not expected to be obtained in all future drilling campaigns.
 - 0 (+\$1.1M) Efficiencies experienced in DX construction activities in the 100-HR-3 Operable Unit. Specifically, the DX construction project has completed 42 road crossing and procured road crossing sleeves, automatic frequency drives, and approximately 200,000 feet of high density polyethylene pipe for less than planned. It is anticipated that this positive cost variance will continue.
 - (+\$1.1M) Efficiencies realized in the CW-1 ponds characterization by combining with the Gable Pond characterization, as well as, efficiencies in the landfill characterization activities. Cost was also lower for the development of the haul road for Multi Incremental Sampling as only a portion of the road from Beloit Avenue and around the site perimeter required development. In addition, subcontracting of drilling support and field performance of the burial ground sampling and analysis project, as well as, effective use of resources to prepare the 200-MG-1/2 EE/CAs, Action Memos, SAP, and RAWP documents has resulted in underruns in the Landfills/Misc Sites activities. CTD underruns are being evaluated and will be addressed as part of the RL RCR comment incorporation and implementation of PMB Rev.2.



• RL-0013 (+\$0.7M) positive variance is within reporting thresholds. However, the variance is attributable to efficiencies in MLLW 435.1 Compliance waste disposal activities due to direct disposal vs. planned treatment. This is partially offset by additional allocation for Ramp Up and Transition associated with increased ARRA spending within the PBS. Additionally, the TRU Retrieval project continues to incur cost while unable to make planned progress due to significantly deteriorated boxes, resolving the 85-gallon Overpack issues, a respirator failure and associated recovery actions, and weather impacts.

Base Performance by PBS (\$M)

		Co	ntract to D	ate		C	ontract Pe	riod
			Actual					
	Budget		Cost	Varia				
	BCWS	BCWP	ACWP	Schedule	Cost	BAC	EAC	Variance
RL-0011 - Nuclear Mat Stab & Disp PFP	78.9	77.9	78.9	(1.0)	(1.0)	321.8	319.3	2.5
RL-0012 - SNF Stabilization & Disp	102.3	104.0	104.3	1.7	(0.3)	532.6	530.1	2.5
RL-0013 - Solid Waste Stab & Disp	155.7	153.1	146.1	(2.7)	7.0	1,601.0	1,583.5	17.5
RL-0030 - Soil &Water Rem-Grndwtr/Vadose	130.1	127.2	120.6	(3.0)	6.6	1,143.5	1,132.4	11.1
RL-0040 - Nuc Fac D&D - Remainder Hanfrd	32.7	32.0	28.1	(0.7)	3.9	955.3	947.3	8.0
RL-0041 - Nuc Fac D&D - RC Closure Proj	8.9	8.3	8.7	(0.6)	(0.4)	272.1	271.7	0.4
RL-0042 - Nuc Fac D&D - FFTF Proj	8.6	8.6	8.3	0.0	0.3	25.1	24.2	0.8
Total	517.3	511.1	494.8	(6.2)	16.2	4,851.4	4,808.4	42.9
Management Reserve						164.2		
Fee						71.8	_	
Total						5,087.3		

The unfavorable CTD Schedule Variance (+\$6.2M/-1.2%) reflects:

- RL-0030 (-\$2.9M) negative variance is within reporting thresholds and reflects two significant contributors: 1) 100-KR-4 Operable Unit delay in field planning/investigations; in equipment/material installation for Phase 2 Well Realignment; and in start on the Bioremediation Test Plan and design/completion of a Bioremediation test due to ongoing remedial process optimization (RPO) evaluations, and 2) 200-ZP-1 Operable Unit delay in completion of balance of plant mobilization and in road crossings construction; delay in process facility design, inclusion of the Lime Stabilization system, and revisions to mass balance calculations; delay in completion of the 90% Balance of Plant design preparation and review; and delay in preparation of documents needed for the O&M plan partially offset by efficiencies in Interim operation.
- RL-0013 (-\$2.7M) negative variance is within reporting thresholds and is attributable to delays in next Generation TRU Retrieval procurements, ETF fine filter upgrades, and returns of W5 waste.
- RL-0011 (-\$1.0M) negative variance is within reporting thresholds and is associated with work in
 the 236-Z (PRF) facility. Specifically, electrical issues identified during investigations have led to
 more entries than originally planned. Delay in field work team qualification, along with
 contaminated glove and port ring issues resulting in decontamination activities has impacted the
 ability to complete the West Gallery glove box internal cleanout. The impact of the delay in field
 work team availability has diverted fifty percent of the Gallery Glove box field work team's time to



support canyon entries. A management decision was made for one of the qualified PRF field work teams to perform dress/undress training for all PFP D&D field work teams, to mitigate ALARA in high risk areas and minimize the spread of contamination. A three to four week delay has been experienced in PRF due to development of a modified approach to the D&D of the PRF facility.

- RL-0040 (-\$0.7M) negative variance is within reporting thresholds.
- RL-0041 (-\$0.6M) negative variance is within reporting thresholds.
- RL-0012 (+\$1.7M) positive variance is due to the STP positive variance (+\$1.7M) due to: 1) early planned completion of the KOP 4 Phase In-Basin inspections, including the washing of the three KOP streams; 2) early start and advancement of the KOP Conceptual Design; and 3) early start on the testing of the KOP retrieval and separations systems at MASF.
- RL-0042 (\$0.0M) variance is within reporting thresholds.

The favorable Cost Variance (+\$16.2M/+3.2%) reflects:

- RL-0013 (+\$7.0M) positive variance is primarily attributable efficiencies in MLLW Treatment, Liquid Effluents, Slightly Irradiated Fuel, CCP Support, SWOC facilities, and Project Management coupled with a labor reduction (continuity of service). This is partially offset by increased cost for TRU Retrieval activities associated significantly deteriorated containers and resolution of the 85gallon drum Overpack issues.
- Various positive and negative variances contributed to the positive variance in RL-003 (+\$6.6M) are as follows:
 - o (+\$1.3M) 200-ZP-1 Operable Unit Efficiencies in the area of interim operations: The permanent hook-up of well EW-1, general operations/maintenance/modification cost, and annual system calibrations. It is expected that these efficiencies will continue and be available to use for other areas within the project.
 - o (+\$1.2M) The Integration and Assessments budget was level loaded for technology initiatives that will take place in FY 2009. The horizontal drilling initiative contract award was delayed resulting in the CTD cost underrun. This work has now been identified as carryover scope and will be complete in the November time frame eliminating this portion of the CTD positive cost variance. Other efficiencies that have been achieved in Systematic Planning Integration and Sample Management and Reporting have contributed to the CTD underrun. These efficiencies are expected to continue.
 - o (+\$1.1M) Due to company level and Other Hanford passbacks coupled with a lag in hiring overhead staff required to support the ARRA program increases.
- RL-0040 (+\$3.9M) positive variance is associated with recognized efficiencies for demolition of the Industrial 7 Project as a result of utilization of existing site equipment and materials; recognized costs for capital equipment procurements are less than expected; delay in placement of subcontract for Cell 30 design (expect decision from RL and Regulators on path forward by November 30), and under-run in G&A and Direct Distributable allocations.
- RL-0042 (+\$0.3M) positive variance is within reporting thresholds.
- RL-0012 (-\$0.3M) negative variance is due to the following:
 - The negative variance within 100K (-\$3.1M) has three main components: 1) the impact to demolition and waste shipments from the K East Basin excavation has a variance of (-\$1.2M). The effort was completed in FY 2009. 2) K West Basin Operations (-\$2.2M) impacts remaining from implementation of operational controls after a PISA was declared preventing the operation of the IWTS in the K West Basin in prior months and unplanned cost to maintain aging facilities in the 100K Area. These negative variances were offset by efficient performance in other accounts.



- o The STP positive variance (+\$2.3M) CTD is due to: 1) efficiencies in testing support and materials for the EC/ST Retrieval, Transport and Storage systems and MASF facility costs have been less than planned to support a TRL-3 assessment (+\$0.8M); 2) early completion of the KOP 4 Phased In-Basin inspections required less 100K operations support (+\$0.8M); 3) early completion on both the KOP Alternatives Analysis and debris disposition documents (+\$0.2M); and 4) success of inspection system allowed for fewer design engineering resources (+\$0.5M).
- RL-0041 (-\$0.4M) negative variance is within reporting thresholds.
- RL-0011 (-\$1.0M) negative variance is a result of extra entries being made to reactivate the canyon as a result of electrical deficiencies found during investigations, use of overtime to try and recover schedule for the West Gallery glove box cleanout, and delay in field work team qualification to begin work on the East Gallery glove box cleanout on October 1, 2009.

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

		FY	2010	
PBS	Project	Baseline Funding	Spending Forecast	Variance
RL-0011	Nuclear Materials Stabilization and Disposition	138.5	123.8	14.7
RL-0013	Waste and Fuels Management Project	105.8	126.1	(20.3)
RL-0030	Soil, Groundwater and Vadose Zone Remediation	146.0	153.4	(7.4)
RL-0040	Nuclear Facility D&D, Remainder of Hanford	162.0	133.9	28.1
RL-0041	Nuclear Facility D&D, River Corridor	122.8	113.0	9.8
	Total ARRA:	675.2	650.3	25.0
RL-0011 RL-0012	Nuclear Materials Stabilization and Disposition Spent Nuclear Fuel Stabilization and Disposition	58.1 84.7	59.4 81.5	(1.3) 3.3
RL-0013	Waste and Fuels Management Project	110.8	94.6	16.2
RL-0030	Soil, Groundwater and Vadose Zone Remediation	146.4	131.9	14.5
RL-0040	Nuclear Facility D&D, Remainder of Hanford	28.7	20.1	8.6
RL-0041	Nuclear Facility D&D, River Corridor	20.3	20.2	0.2
RL-0042	Fast Flux Test Facility Closure	2.5	1.2	1.4
	Total Base:	451.6	408.8	42.8
	Combined ARRA/Base Total:	1,126.8	1,059.1	67.7

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

The negative variance in RL-0011 Base (-\$1.3M) reflects a newly planned approach in the Plutonium Reclamation Facility (PRF) and continuing min-safe operations in the 2736Z/ZB vaults until the facility is demolition ready in the first quarter of FY 2011. Funds management coupled with efficiencies from implementation of the new approach in PRF will mitigate the variance.



BASELINE CHANGE REQUESTS

In October 2009, CHPRC approved and implemented thirteen (13) baseline changes requests. Eight of the change requests are administrative changes and did not change scope, budget or management reserve. Of the remaining five change requests, one is an advanced work authorization (AWA-R13-10-001), which initiates implementation of Contract Modification 068 to accelerate the start dates for the Central Characterization Project TRU characterization and TRU waste shipments for \$1.722 million in fiscal year 2010 and another change request (BCR-PRC-10-004) implemented DOE direction to complete the Feasibility Studies for the preparation of the 200-CW-5 and 200-PW-1/3/6 Operable Units and to prepare a single Z Area Liquid Discharge Sites Proposed Plan and Record of Decision with no change to the overall contract budget base. The third change request (BCR-013-10-004) incorporated GPP planning on the container restraint system and related work scope associated with the storage of slightly irradiated fuel with no change to overall FY 2010 contract budget base. The last two change requests (BCR-R40-09-002, Rev. 1 and BCR-PRC-10-009) implemented corrective actions as identified and agreed to in the DOE-HQ approved Corrective Action Plan for the External Independent Review for the Three RL American Recovery & Reinvestment Act Projects (8 Major Findings, and 15 Observations), which increased the overall contract budget base by \$29.538 million. While \$70K of management reserve was used in October 2009, \$403K was also generated by the Projects revising the approach to complete planned scope resulting in an overall increase of \$333K in management reserve. Implementation of the October 2009 change requests discussed above into the Earned Value Management System altered the performance measurement baseline and the management reserve status and made no change to fee. The changes are summarized in the Tables below (negative number represents reduction):

October 2009 Summary	ot .	Changes	(\$K)
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September 2009 Bas					
	FY 2009	FY 2010	FY 2011	FYs 2009-2011	FYs 2012 - 2018
PMB	653,429	953,854	880,377	2,487,660	3,526,210
Mgmt Reserve	12,359	17,055	6,094	35,508	148,093
Fee	0	0	0	0	0
Total	665,788	970,909	886,471	2,523,168	3,674,303

October 2009 Basel					
	FY 2009	FY 2010	FY 2011	FYs 2009-2011	FYs 2012 – 2018
PMB	653,429	973,877	890,313	2,517,619	3,527,179
Mgmt Reserve	12,359	17,399	6,024	35,782	148,153
Fee	0	0	0	0	0
Total	665,788	991,276	896,337	2,553,401	3,675,331

Delta Change in Bas					
	FY 2009	FY 2010	FY 2011	FYs 2009-2011	FYs 2012 – 2018
PMB	0	20,023	9,936	29,959	969
Mgmt Reserve	0	344	(70)	274	59
Fee	0	0	0	0	0
Total	0	20,367	9,866	30,233	1,028



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 F	Y18	
		Planned Subcontracting*	\$2,524,483,195						
	Contracts + Purchase Orders + Pcard							Contract-to-Date Awards =	\$844,159,520
Reporting	ARRA		Non-ARRA		Total	Percent of	Goal	Balance Remaining to Award =	\$1,680,323,675
Classification	(\$)	%	(\$)	%	(\$)	Total	(%)	Goal Award (\$)	Bal. to Goal (\$)
SB	\$146,822,446	69.17%	\$264,897,955	41.92%	\$411,720,401	48.77%	49.30%	\$1,244,570,215	\$832,849,814
SDB	\$31,349,678	14.77%	\$38,236,025	6.05%	\$69,585,703	8.24%	8.20%	\$207,007,622	\$137,421,919
SWOB	\$35,622,775	16.78%	\$48,691,185	7.71%	\$84,313,960	9.99%	6.50%	\$164,091,408	\$79,777,448
HUB	\$2,088,670	0.98%	\$10,853,890	1.72%	\$12,942,560	1.53%	3.20%	\$80,783,462	\$67,840,902
VOSB	\$27,762,292	13.08%	\$18,360,249	2.91%	\$46,122,541	5.46%	2.00%	\$50,489,664	\$4,367,123
SDVO	\$1,505,260	0.71%	\$2,723,670	0.43%	\$4,228,930	0.50%	2.00%	\$50,489,664	\$46,260,734
NAB	\$1,123,712	0.53%	\$2,519,157	0.40%	\$3,642,869	0.43%	0.00%	*10-year subcontracting projection	
Large	\$49,587,294	23.36%	\$227,816,387	36.05%	\$277,403,681	32.86%	0.00%		
GOVT	\$4,316	0.00%	\$506,584	0.08%	\$510,900	0.06%	0.00%	PRC clause H.20 small business (SB) requirement:
GOVT CONT	\$15,839,773	7.46%	\$138,019,493	21.84%	\$153,859,266	18.23%	0.00%	≥17% of Total Contract Price pe	rformed by SB
EDUC	\$0	0.00%	\$14,615	0.00%	\$14,615	0.00%	0.00%	T otal Contract Price:	\$4,515,556,411
NONPROFIT	\$119	0.00%	\$628,726	0.10%	\$628,845	0.07%	0.00%	17% requirement:	\$767,644,590
FOREIGN	\$0	0.00%	\$21,813	0.00%	\$21,813	0.00%	0.00%	Awarded:	\$411,720,401
Total	\$212,253,948		\$631,905,572		\$844,159,520			Balance to Requirement:	\$355,924,189

Notes:

- 1. During the first month of FY 2010, the Small Business, Disadvantaged Business and Woman Owned and Veteran Owned achievement rates exceed the five year goal.
- 2. ARRA funded awards exceeded base contract awards.
- 3. This chart includes award values of service contracts, contract amendments, purchase order line items and p-card purchases made by the CHPRC in FY 2010.
- 4. Over 95% of the total dollars arise from service and staffing Contracts and Contract amendments with 3% of the dollars arising from p-card purchases and 1.2% are purchase orders for materials and equipment.
- 5. This report does not include blanket contract values which are only estimates and not used for payment obligations.
- 6. Data is summarized by business categories (WMBE codes) in accordance with socioeconomic reporting requirements. Small business categories overlap and should not be added together.



GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

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

