

J. G. Lehew President and Chief Executive Officer

# Monthly Performance Report

U.S. Department of Energy Contract, DE-AC06-08RL14788 Deliverable C.3.1.3.1 - 1 August 2011 CHPRC-2011-08, Rev. 0

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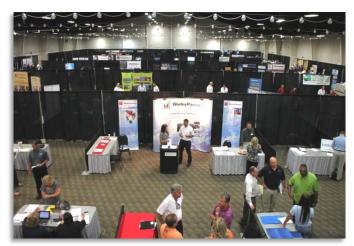
## **EXECUTIVE SUMMARY**

CHPRC sponsored a job fair with more than 120 employers looking to meet Hanford employees transitioning out of the current workforce. More than 1,000 employees used the opportunity to meet with potential employers on August 19<sup>th</sup> at the TRAC in Pasco, Washington. Approximately 2,000 invitations were sent to potential hiring companies and CHPRC placed advertisements for free booth space at the job fair in newspapers across the United States.

The Decommissioning and Demolition (D&D) Project removed tank D-10 from U Canyon. Tank D-10, deposited for storage in U Canyon's Cell 30 in 1965, contained over a kilogram of transuranic (TRU) waste – too much to be compliantly grouted in place with the building.



Tank D-10 is removed from U Canyon



CHPRC sponsored a job fair that welcomed 120 employers to meet with the company's transitioning workforce.

D-10 removal was one of the last steps to achieving U Canyon's demo-ready status. The tank is now awaiting shipment at the Central Waste Complex. Grouting of U Canyon void spaces is approximately 88 percent complete. Demolition preparations continued for the Plutonium Finishing Plant 2736-Z Vault Complex. The last of the three ancillary buildings, 2721-Z building, was declared fully ready for demolition, the 2736-Z/ZA/ZB vault storage buildings were certified cold and dark and temporary construction fencing was installed around the perimeter of the complex for site control. Demolition preparation activities are now underway on the three vault structures, with CHPRC Decommissioning and Demolition (D&D) planning to demolish all six structures.

The Soil & Groundwater Remediation Project completed excavation of Zone A of the BC Controlled Area and removal of the stockpile to the Environmental Restoration Disposal Facility (ERDF) is complete. The team shipped about 20,000 truckloads to ERDF, disposing of approximately 483,000 tons of contaminated soil.

The Engineering, Projects and Construction (EPC) team surpassed 90 percent completion on construction of the 200West Groundwater Treatment Facility. Construction acceptance testing is in progress for many areas of the facility. This will be the second pump and treat facility completed this year and it will be Hanford's largest pump and treat facility to date.

The Waste & Fuels Management Project (WFMP) team met their Recovery Act goal to disposition 2,000 cubic of contact-handled TRU waste, the fourth of their five Key Performance Parameters.



## **Focus on Safety**

The August Presidents' Zero Accident Council (PZAC) meeting was hosted by the Waste and Fuels Management Project. The three principal themes for the meeting were:

- Change Management Choosing to be Safe
- The Value of Communication During Times of Change
- Protection of the Environment and Our Safety = PRICELESS

Two injury reports were presented and topics relating to coping and adapting to change were addressed as part of the meeting.

In August, five "*Thinking Target Zero*" bulletins were published addressing the following topics:

- Pedestrian Safety
- Heat Stress
- Lightning
- Floor Openings
- Sharp Edges

Additionally, two *Special Safety Bulletins* on Meningitis and Microwave Fires were communicated throughout CHPRC during the month.

The *Weekly Safety Tailgate* briefing packages continued in August. Five Tailgate presentations were delivered to the Projects covering such relevant and current topics as: stretch-and-flex exercises, carbon tetrachloride at Hanford, 8-criteria lockout/tagout, bio-based products, summertime nutrition, pre-job briefings, security, adverse weather, total worker health, electrical safety, safe-to-work checking (LO/TO), alternative transportation, radiological dosimetry, tags/signs/barriers, look-alike equipment, physical exams - blood draws, propane grills, vehicle safety, performing safety observations, and injury/illness and close call summaries.

CHPRC sent 15 delegates to the 27th Annual National Voluntary Protection Programs Participants' Association (VPPPA) Conference in New Orleans, LA. The conference provided two full days of workshops addressing current safety, health and environmental topics. The workshops are presented by company representatives from general industry, the DOE and DOD complexes, and manufacturers of safety, health and environmental innovations. John Lehew and Union Safety Leaders jointly presented a workshop titled Stop Work Without Fear of Reprisal

that outlined how CHPRC successfully empowers employees to stop work when there are safety concerns. CHPRC attendees also partnered with other DOE and contractor representatives in a one day preconference workshop that provided an overview of upcoming changes in the DOE Voluntary Protection Program.





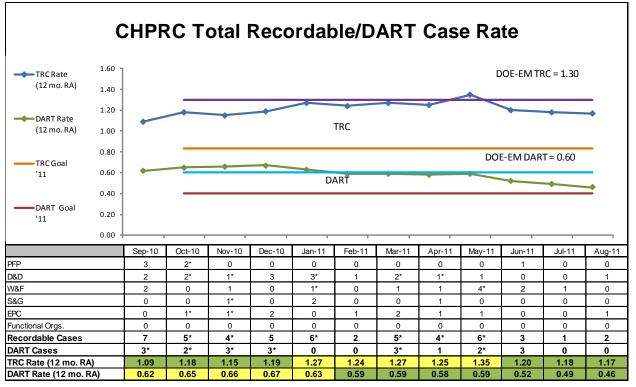
CHPRC-2011-08, Rev. 0 · Overview





## TARGET ZERO PERFORMANCE August 2011

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

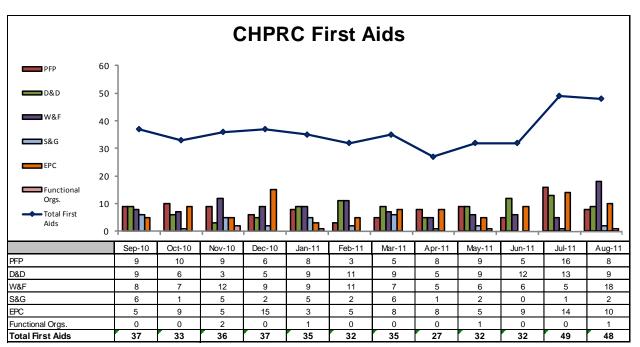


**Total Recordable Injury Case (TRC) Rate** – The 12 month rolling average TRC rate of 1.17 is based upon a total of 50 recordable injuries. There were two Recordable cases in August and three new/adjusted Recordable cases (one from April 2010, one from October 2010, and one from July) one of which was a DART case with Days Away. There are currently three cases under review requiring additional information.

**Days Away, Restricted or Transferred (DART) Workdays Case Rate** – The 12 month rolling average DART rate of 0.46 is based upon a total of 20 cases (11 Restricted, 9 Day Away Cases).

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





**First Aid Case Summary** – 48 first-aid cases reported in August. The biggest contributors were 21 sprains, strains and/or pains, 9 insect bites/stings and 5 Abrasions/Contusions. Of the 21 sprains, strains, and/or pains, most resulted from awkward positions, motion, or overexertion. The insect bites/stings coincide with the return of the warmer weather.

## **PROGRAM SUMMARIES**

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

Active CHPRC participation in the Site Wide (multi-contractor) committees continued, with each working on defined actions to support the following projected implementation schedules:

- Lockout/Tagout and Industrial Hygiene Database in September 2011
- Fall Protection and Confined Space in December 2011
- Respiratory Protection, Electrical Safety, and the Employee Job Task Analysis in 2012
- Support to the Site Wide effort included technical input and coordination for "gap" training for planned implementation of revisions to the Hanford Site Lockout/Tagout Program.

Throughout the month, OS&IH Central Programs continued to partner with all Project safety and health organizations to provide supplemental in-field support, with an expanded coverage at Engineering, Projects and Construction's 200 West Pump & Treat construction project. In addition to observing work, field support included participation in subcontract reviews, work site assessments, walk-downs, hazard analysis, pre-job meetings, work observations, emergency preparedness drills, communication on regulatory code activity, and interpretation of requirements.

CHPRC industrial hygienists met to review this year's implementation of the heat stress program to share lessons learned and discuss heat stress hazard evaluations including clothing adjustment factors, using the American Conference Governmental Industrial Hygienist Threshold Limit Value chart, taking wet blub globe temperature meter readings, documentation, acclimatization, physiological monitoring and heat stress considerations when conducting emergency preparedness (EP) drills.



In August, EP conducted 16 drills, including 11 operational drills. Field response and recovery capabilities continue to be improved as both the TALON robot and the MOVERS radiological emergency response vehicles were prepared for deployment. Hazards surveys for Plutonium Finishing Plant and Solid Waste Operations Complex were finalized and submitted to RL for approval.

Radiological Protection continued the enhancement of Computer Based Training centered on the revised PRC-PRO-RP-1622, *Radiological Design Review*, to help radiological workers understand expectations and documentation related to the As Low As Reasonably Achievable (ALARA) design review process. Radiological protection addressed year end challenges, including the review of ALARA goal estimates and developing a process for determining protocols to compliantly reduce the number of workers having to complete exit bioassays. An electronic process to perform and record radioactive source activity decays was also implemented in August.

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

#### **Environmental Management System**

Fourteen EMS targets have been completed this fiscal year to-date. All remaining targets are on schedule for completion in accordance with their implementation plans. New targets for FY12 are being developed.

#### **Environmental Protection**

**TPA:** Finalized TPA milestone change packages related to FY 2012 funding for Central Plateau activities which support both client and regulator priorities.

#### **RCRA Site-Wide Permit:**

Part B: Draft application was completed for the cesium/strontium dry storage project. Worked with RL to review and comment on the site-wide permit packages that were placed in Sharepoint by Ecology.

## NEPA:

Finalized NEPA supplemental analysis, "Management of Spent Nuclear Fuel from K Basins at the Hanford Site," which was approved by DOE-RL. The analysis concludes that no supplemental environmental impact statement would be needed for the current proposal for management of knockout pot material.

## NRDWL:

The "Draft Environmental Assessment for Closing Hanford's Nonradioactive Dangerous Waste Landfill and Solid Waste Landfill," was issued for public review. Comment period closes on October 13, 2011. **Inspections:** 

## Annual Stack Inspection: WDOH performed an inspection of major stack 296-K-142 at the Cold Vacuum Drying Facility in the 100 K area, with no issues noted.

400 Area: The required RCRA permit inspection of the 400 area noted two items for correction.

#### **Business Services**

The 2011 Inventory of Sensitive Property and Equipment has been completed. The accuracy rate for item accountability was 99.81% with 99.98% of the value accounted for. Loss Damage Destruction Reports (LDDR) are in process for 18 items valued at \$25,390.11, the most successful physical inventory since CHPRC contract assumption.

Facilities and Property Management has developed a detailed schedule for the return of Leased Mobile Offices, Rental Vehicles and Equipment and the move plans to reset the company in its new smaller



footprint following workforce restructuring. To date 23 leased mobile offices have been returned and Projects are returning rentals commensurate with the completion of scheduled activities.

The procurement group awarded 44 new contracts with a total value of \$4.01M, amended 617 existing contracts with a total value of -\$28.4M, and awarded 567 new purchase orders valued at \$2.16M to support Base/ARRA acceleration objectives.

As measured at the end of the first 35 months, procurement volume has been significant; \$1.716B in contract activity has been recorded with approximately 49.9% or \$857M in awards to small businesses. ARRA funded activity totals 44% or \$757.9M of the grand total. This includes 5,247 contract releases, 10,496 purchase orders, and over 179,700 P-Card transactions.

Material Services personnel, including two interns and one exempt, supported Project Controls by locating and compiling P-Card, Contract, Purchase Order, Cat ID, and "Transgroup" information into PDF files for both ZP-1 and STP projects in answer to time-constrained Request for Equitable Adjustment audit questions.

Supported the "*Right Sizing of Material Stored in MSA Warehouses*" effort for MSA during this reporting period. This inquiry focused attention on material that has been in storage for five years or greater, and has had no activity against it. To simplify the effort, we combined both Spare Parts and Convenience Storage lists, divided it according to Project, and sent it out to individual facility chief engineers to disseminate to their Design Authorities who were best able to decide if the parts were still required. These reports were returned to MSA in their original format and provided direction on each item in the list. Approximately 539 Cat ID's were identified for excess, totaling approximately \$522K worth of inventory.

During the month of August, we sent eight Declaration of Excess (DOE) documents to MSA Asset Control worth over \$161K. During FY2011, Material Services created 31 CHPRC DOE's with 1,030 Cat ID's identified for excess totaling \$780,904.

Completed an assessment of Energy Northwest's (ENW) documentation for non-standard calibration services. ENW's documentation fully supported the costs charged.

Supported an audit of the 100K Quality Level 1 Safety Class (SC) and Safety Significant (SS) spare parts by creating queries and spreadsheets of the material in controlled storage at the 2101M spares warehouse.

Nearly all P-Card records have been reviewed through May 2011 and scanned into IDMS.

Material Services and P-Card Administration personnel supported two Internal Audits, the second FY2011 P-Card audit, and the Personal Protective Equipment audit.

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

Working with the associated Projects, Contract Compliance and Change Management (CC&CM) continued to support the DOE requested KPMG audit of CHPRC's responses to the KPMG audits of Change Proposals CP 012.004, *Sludge Treatment Project*, and CP 030.004B, *200-ZP-1 Operable Unit Operations and Maintenance (O&M)*, findings. This included responding to extensive KPMG follow up questions after their July 18–28, 2011 field visit. CHPRC efforts on the KPMG CO #30 ZP-01 O&M audit concluded with the August 18, 2011 exit conference with KPMG.

CP 1046, *Implement Interim Actions for the 200-UP-1 Operable Unit - S/SX Pump and Treat*, generated in response to Change Order #107, was successfully negotiated with DOE RL.



CC&CM and EPC continued efforts in support of the DOE sponsored DCAA audit of CHPRC REA 000.005, *Support Trailers*, and initiated their efforts to support the DOE sponsored USACE audit of CHPRC CP 1046, *Implement interim actions for the 200-UP-1 Operable Unit - S/SX Pump and Treat*.

During August, kick-off meetings were held with the responsible projects for the following Change Orders:

- CO #094, Low Level/Mixed Low Level Waste Volume Inventory Material Difference
- CO #095, CCP Interface Requirements
- CO #096, Outer Zone Waste Site Remediation extent of contamination condition
- CO #097, 100-K Area Zone Closure Activities
- CO #098, 100-K Area Group 1 Waste Site Remediation extend of contamination

During these meetings roles and responsibilities and action assignments for preparation of supporting documentation required to definitize these changes were discussed. Definitization of these Change Orders is required to close the reopener clause associated with PRC Mod 125

Work was stopped on the preparation of CP 030 135 2011, *Bioassay Work*, in early August after DOE RL shared they intended to unilaterally implement this change. Work was completed on the preparation of Change Order 90, *Initiate OU Decision Documents for the 300-FF-5 OU*, but transmittal to RL was put on hold after RL shared they intended to unilaterally implement the change.

Work continued on the development of a Change Proposal to address the impacts of added scope associated with *Multi-incremental Sampling*.

During August, Contract Compliance received and processed six (6) contract modifications (numbers 130, 161, 164, 178, 179, and 182) from RL. The Correspondence Review Team reviewed and determined the distribution for 47 incoming letters and the Contract Compliance Manager reviewed 55 outgoing correspondence packages.

Efforts continued on the tasks associated with implementation of the Timberline estimating software. Activities focused on development of the estimating assembles for Waste Site Remediation and D4 and preparation of documentation required for certification of the estimating system.

Efforts to prepare for the anticipated spring 2012 DOE Office of Engineering and Construction Management (OECM) recertification review of the CHPRC EVMS system were kicked off in August with the award of a subcontract to provide CHPRC personnel EVMS training, perform an independent review of CHPRC EVMS data and systems, and to support CHPRC preparations for the review. This subcontract also includes a task to support implementation of the corrective actions resulting from the Management Assessment of the effectiveness of CHPRC PRC change management processes and deliverables associated with estimating procedures and training.

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

Central Engineering (CE) completed the technical assessment for the CHPRC Readiness Assessment Implementation Plan for 221-U Canyon D-10 Tank Removal and the DOT 7A Type A Shipping Container housing the D-10 Tank. The D-10 Tank was removed and placed in the cask successfully.

CE chaired a meeting of the Hanford Company Chief Engineers. The first ever meeting of the Chief Engineers provided an opportunity for the Chief Engineers to discuss common issues specific to Hanford and to set the foundation for cooperative efforts in the future.



CE chaired and participated in the kick-off for the final design review KOP Material Process and MCO Operations.

CE attended ASME B&PV Code committee meetings in Boston, MA the week of 8/7/11. CE has membership on two Section III committees, NUPACK (nuclear packaging – Div. 3) and MF&E (Materials Fabrication & Examination – Div. 1).

CE presented an electrical safety topic to the AVS staff regarding recently released harmonized NRTL Standards for Mexico, Canada and the US. The initiative to harmonize NRTL standards is being sponsored as part of North American Free Trade Agreement (NAFTA) and allows acceptance of specific items with CSA labels that do not have the US sub script.

Work Site Assessment (WSA) -10628 was performed to evaluate the effectiveness of the HVAC System Health Reports for D&D, W&FM, and PFP. This WSA was completed more than 3 weeks ahead of schedule.

CE participated in a monthly interface meeting with the RL Safety and Engineering Division staff. Topics ranged from CSE program status to discussions on the HEPA filter degradation program.

CE participated in the Energy Facility Contractors Group (EFCOG) Engineering Practices Working Group (EPWOG) Cognizant System Engineering program Subgroup teleconference. Publication of a Best Practice on the preparation of System Health Reports was the lead topic. Other topics included discussion of CSE qualification and performance metrics/trending.

CE participated in the Joint Evaluation Team (JET) review of the restart of the STP KOP operations. A level 3 Readiness Assessment was recommended by the JET.

CE completed activities for the qualification of a hard facing overlay procedure. The procedure will be used to re-furbish/maintain the Universal Processor Shear Jaws in support of CHPRC D&D activities.

CE entered Condition Reporting and Resolution System (CRRS) action items to document deficiencies in the 100K implementation of PRC-PRO-EN-16331, *System Engineer Program*, and PRC-PRO-EN-20051, *Engineering Selection, Qualification, and Training*.

CE supported the 200W Pump and Treat Engineering in providing a management observation worksheet (MOP) on the installation of butterfly valves on the facility's RTP tanks.

CE reviewed and approved PRC-STP-00329 Rev. 3B, Modified Annex Design Specifications.

CE supported the Sludge Treatment Project (STP) in the design approach for the piping and pipe supports for the KW Annex building.

CE has started a new engineering standard to replace PRC-RD-EN-19440, *Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Safety Relief Valves.* PRC-RD-EN-19440 will be deleted when the engineering standard is released.

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

• Compliance of an AEA Technology cable tester for the PFP Closure Project. The tester was verified as having a UL listed charger and acceptable for use. (RLM)



- Evaluated a Square D circuit breaker for suspect materials, fabrication defects and wear indications. The circuit breaker was confirmed to be new, fabricated with acceptable materials, and free from functional defects. (CSH/RLM)
- CE evaluated an electric Strip-Tec wire stripper and a SYMMETRA UPS for NRTL compliance. (CSH, GPM, RLM)

CE supported D & D KW Basin project in the evaluation of the 190KW Leaded Drum Lid Lift analysis/evaluation.

CE participated in the monthly EFCOG Fire Protection Subgroup teleconference. Key topics included discussion of a Fire Protection personnel survey and implementation of NFPA 801, and compliance with DOE-STD-1066.

CE continues to provide welding services to the several site contractors, including qualification of welders and bonders, and subcontractor welding documentation review and approval.

## Communications

## **Internal Communications**

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

CHPRC sponsored and promoted a job fair on August 19<sup>th</sup> to support its transitioning workforce. More than 120 employers and 1,000 employees attended the free event at the TRAC in Pasco.

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

## **Media Relations**

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

Supported media to advertise the job fair. The event was featured by Tri-City Herald, local news channels KNDU and KVEW, and nuclear trade publications, as well as media such as *Seattle Times, Houston Chronicle, Bellingham Herald* and *Allvoices.com*.

Promoted Partners 'N Pals with local media.

Collaborated with RL public affairs in preparing news release and photo gallery on removal of the D10 tank removal and remediation at the BC Controlled Area for posting on Hanford Site Facebook page.

## **Recovery Act**

Videos produced in August included 200 West Groundwater Treatment Facility 75 percent complete, U Canyon D-10 Tank Removed, 100K Area reactor support building demolition, and the 2736-ZB Vault Complex prepared for demolition.

Supported RL media (press release, social media updates, photos, and video) covering remediation complete at Zone A of the BC Controlled Area and removal of the D-10 tank from U Canyon. Both events were featured by the *Tri-City Herald*. The BC Controlled Area story was featured by the *Seattle Times, KXLY Spokane, TheNewsTribune.com* 

The August issue of the DOE-EM Recovery News newsletter featured a story on CHPRC Recovery Act hire Aaron Cherney. For future issues, CHPRC submitted stories on how CHPRC Recovery Act work is



on target to be completed on or ahead of schedule, and developed an EM News Flash on achieving a record amount of groundwater cleanup thus far in 2011.

### **Public Involvement**

Developed and distributed notification and advertising announcing a 30-day extension for the public comment period on the Proposed Plan for Remediation of 200-PW-1, 200-PW-3, 200-PW-6, and 200-CW-5 Operable Units. Organized comments from more than 100 stakeholders and provided a summary of major comment themes to the TPA agencies. Began using CommentWorks Database for posting and sorting comments.

Developed public involvement plans to support the proposed 2012 TPA milestone change packages and the upcoming River Corridor Decision documents.

Coordinated the start of a 45-day public comment period for the Environmental Assessment for Non-Radioactive Danger Waste Landfill and Solid Waste Landfill Closure. Developed and distributed electronic notification, advertisement, and a fact sheet. Entered documents into the Administrative Record and provided information for the DOE Hanford Events Calendar.

Reviewed and provided public involvement/communications input for the draft Record of Decision for the Remediation of 200-PW-1, 200-PW-3, 200-PW-6, and 200-CW-5 Operable Units, the Proposed Plan for the Remediation of 100-KR-1, 100-KR-2, and 100-KR-4 Operable Units, and the River Corridor Remedial Investigation/Feasibility Study.

Provided CHPRC input for DOE's annual update to the Hanford Advisory Board.

## **PROJECT SUMMARIES**

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

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

## American Recovery and Reinvestment Act (ARRA)

Removal of plutonium-contaminated process equipment continued as a top priority in readying the PFP Complex for demolition, with a particular focus on removal of gloveboxes and associated piping and ductwork from the process and lab areas. Glovebox Deactivation, Decommission, Decontamination, and Demolition (D&D) is complete in the backside vault rooms, Standards Laboratory, Analytical Laboratory, and the Radioactive Acid Digestion Test Unit (RADTU). A total of 130 gloveboxes have been removed to date with Recovery Act Funds. Of these, 120 have been shipped out of PFP for treatment or disposal and one has been set aside and staged for size reduction and disposal as transuranic (TRU) waste. Two gloveboxes (179-10 and 179-12) were shipped to an offsite treatment facility for size reduction.

The 2721-Z, 2731-ZA and 2736-ZC buildings were certified Cold and Dark, with 2731-ZA and 2736-ZC also declared ready for demolition. CHPRC D&D plans to demolish the four-building PFP Vault Complex and two ancillary structures and complete waste load-out by the end of December.

Final area cleanout is continuing throughout the three PFP laboratories and backside vault rooms of 234-5Z. To date, 11 of the 47 rooms in these areas have been inspected and verified as complete in support of the Key Performance Parameter for 234-5Z Ready for Demolition (KPP-1).

External isolations, process equipment removal, and decontamination continued on the 47 Remote Mechanical A (RMA) and Remote Mechanical C (RMC) Line gloveboxes, where significant radiation dose rates and high contamination levels complicate work. Removal of the conveyor system from the



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long HC-1 conveyor glovebox and removal of the guide rails was completed in Rooms 228A and 228B. A large shielding water wall was drained and then removed from between Rooms 228A and 228B to provide additional working space for D&D and removal of gloveboxes in these rooms.

This period, 33 feet of highly contaminated process solution transfer lines in the 234-5Z building were removed, bringing the total removed to date to 535 feet. Process vacuum system piping removal remains on hold in support of high-priority KPP 234-5Z Ready for Demolition work scope in the process and lab areas, and total removed remains at 1,210 feet. Insulator crews removed 345 feet of asbestos from piping and ductwork, bringing the total linear footage completed at PFP with Recovery Act funds to 14,999 feet.

As the pace of D&D work has accelerated at PFP, so have waste generation rates. CHPRC has now shipped approximately 3,542 cubic meters of waste from PFP with support from Recovery Act funds, including 2,849 cubic meters of low level and mixed low level waste, 665 cubic meters of TRU waste, and 28 cubic meters of nonradioactive waste.

Removal of the 250 contaminated HEPA filters from deactivated filter room 316 is complete and removal of filters from room 311 has been delayed due to the 291-Z fan failure.

### Base

**236Z Plutonium Reclamation Facility** – Troubleshooting on the canyon crane indicated that the "B" phase of the trolley AC motor had an open connection. Due to the failure of the motor, the trolley could not be used to return the crane to the maintenance platform. A spare AC motor was procured in the event that the motor is damaged and needs to be replaced.

A system to use a winch installed in the west gallery glovebox to retrieve the crane was developed. A pull line was installed between the galley glovebox and the crane. The winch was installed in the glovebox, and on August 18<sup>th</sup>, the field work team successfully relocated the canyon crane trolley to the maintenance platform.

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

The knockout pot (KOP) pretreatment campaign was completed, and the KOP Subproject technical staff has been evaluating campaign data and preparing the report to document the results. The Pretreatment Campaign Report will be completed mid-September 2011 to meet Tri-Party Agreement (TPA) Milestone M-016-170, Complete KOP Material Pretreatment by September 30, 2011.

The KOP Subproject Team completed the KOP Processing System (KPS) Final Design Report and associated Design Requirements Compliance Matrix and initiated the Formal Design Review, which is the selected method for completing design verification of the KPS Final Design Report. The Formal Design Review is scheduled to be completed and the Final Design Report issued in October 2011.

KOP Subproject engineering and Quality Assurance (QA) personnel participated in supplier source inspection activities for the scrap basket copper inserts (in the United Kingdom) and the size separation screen (in New Jersey). The copper inserts and the separation screen are both safety significant and subject to OCRWM-related QA requirements. The procurement activities are on schedule.

KW Annex initial modifications continued, with deconstruction of a portion of the KW Annex starting early August utilizing "stick-by-stick disassembly" (due to safety reasons at this phase of deconstruction) of a portion of the Annex.



The Fuel-Special Packaging Authorization (F-SPA) Shipment Evaluation Checklist (SEC) and supporting documentation for shipments of KOP material in a multi-canister overpack (MCO) has been updated to incorporate RL comments. The updated SEC package was provided to RL.

Cold Vacuum Drying Facility (CVDF) operations continued to perform hands-on training for operations and exempt staff to support processing the scrap fuel MCO. Operations staff successfully completed the processing of a training MCO in Bay 5. In addition, final preparations, such as the development of work packages, continue to be made to replace the Bay 5 vacuum pump (VPS-P-2511), the general service helium safety relief valves, and the tempered water cooling pumps.

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

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

## ARRA

Work is nearing completion on a "middle-ware" utility to provide an accessible, user friendly and comprehensive interface for waste inventory, forecast, and reporting data. The product is currently in test and will be transferred to production in September. Completed the Key Performance Parameter (KPP) to ship 1,800 cubic meters (m3) of Mixed/Low Level Waste (MLLW) to a treatment facility. M-91-42 /435.1– shipped 107 cubic meters (m3) to processing, (1,390) m3 total under ARRA) and completed 59 m3 during the month (1,159) m3 total under ARRA); M-91-43 – shipped 53 m3 to processing (588 m3 total under ARRA) and completed 127 m3 during the month (443 m3 total under ARRA).

Transuranic (TRU) Retrieval removed 153 m3 of contact handled (CH) TRU waste from the trenches and shipped 191 m3 of CH TRU waste to a Treatment, Storage, and Disposal facility (2,164 m3 total under ARRA). Next Generation Retrieval (NGR) removed 233 drums (48.5 m3); completed assay of 263 drums (Gamma Assay), 47 drum (Passive/ Active Neutron [PAN] Assay System), vented 44 TRU drums, and x-rayed 43 drums in the Real-Time-Radiography (RTR) System.

## Base

The W&FMP continued maintaining facilities in a safe and compliant condition; Canister Storage Building (CSB) completed annual Multi-Canister Overpack Handling Machine (MHM) interlock calibration and functional check .

The Central Waste Complex (CWC) completed three on-site shipments/transfers, 19 containers; and received 109 shipments/transfers, 1417 containers.

Liquid Effluent Facilities 200A Treated Effluent Disposal Facility (TEDF) discharged 1.5M gallons (CY 10M) and received Environmental Restoration Disposal Facility (ERDF) leachate (213k gallons) at Liquid Effluent Retention Facility (LERF) Basin 44 (CY 1.3M gallons).



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

## ARRA

Progress through the end of the fiscal month August is summarized in the table below.

	Α	ugust	Cumulative		
Activity	Planned	Completed	Planned	Completed	
Well Drilling (number of wells) –	0	0	303	303	
Well Decommissioning (# of wells) –	0	0	280	280	
100 DX Pump and Treat (P&T) –	_	-	100	100	
Construction/Startup (percent)					
200 West P&T – Final Design (percent)	-	-	100	100	
200 West P&T – Construction (percent)	6	6	88	94	
200 West P&T – Testing/Startup (percent)	8	8	90	88	

#### Base

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

- 160 well locations were sampled with a total of 546 samples being collected
- 61 aquifer tube samples collected from 38 tubes at 19 locations
- 16.2M gallons groundwater treated by ZP-1 treatment facility
- 21.5M gallons groundwater treated by KX treatment facility
- 6.9M gallons groundwater treated by KW treatment facility
- 4.4M gallons groundwater treated by KR-4 treatment facility
- 22.3M gallons groundwater treated by DX treatment facility
- 71.3M gallons of groundwater treated total

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

## ARRA

Continued grouting of the 221U Canyon facility process cell voids.

Completed grouting of the electrical and piping galleries.

Began grouting the hot pipe trench.

Continued preparation for grouting activities in the ventilation tunnel and ventilation duct to sand filter.

Completed construction of the structural grout bulkheads for the rail tunnel.

Completed the Cell 30 Tank D-10 process vessel retrieval, loading, and shipping.

The 209E facility completed cutting tanks 101 and 105.

Applied fixative to all 200 series slab tanks.

Continued abatement activities in 284W Power House.

Continued decommissioning North Slope wells.

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



The Railcar Disposition Project completed all field activities including demobilization of all materials, trailers, and equipment from the site. The Response Action Report (RAR) proceeded through the revision process and will be ready for RL review in early September.

Remediation activities continued in the Model Group (MG)-1 waste sites.

## Base

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

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

Started roof repair at REDOX.

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

## ARRA

## Facilities

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

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

Continued demolition of the 181KW River Pump House and completed1605KW Guard House.

Continued with demolition of the 183.4KE Clear Well.

Continued with asbestos removal in the 190KW Main Pump Houses.

## Waste Sites

Verification sampling of waste at 100-K-77, the last ARRA funded waste site at 100-K, was completed in August. Backfill is expected to be completed by the end of September 2011.

	Augus	st 2011
Excavation on ARRA Waste Sites and Sub-Grade Structures	Tons	Containers
ARRA Cumulative (fiscal year [FY]2009 to Date)	132,630	7,197

## Other

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

## Base

## Facilities

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

Continued below-grade demolition of the 1706KE Radiation Control Counting Laboratory and 1706KER Water Studies Recirculation Building.

Demolition of the 183.2KE Sedimentation Basin will continue in FY 2012.

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



## Waste Sites

- The MOA for waste site 100-K-63 was approved and issued on August 24, 2011.
- Excavation and load out were completed at the following waste sites in August: •
  - o 1706-KE below grade structure
  - o 1706-KER below grade structure
  - o 105-KE East Annex
  - o 105-KE West Annex
  - 105-KE Cyclone Separator
- The table below displays the number of tons and containers sent to ERDF during August.

Active Excavation on Base Waste Sites and Sub-	Aug	just 2011
Grade Structures	Tons	Containers
105-KE Admin	3,517	171
105-KE West Wall	4,799	231
1706-KE	7,225	340
1706-KER	6,587	319
110-K-6	1,629	77
Monthly Total	23,757	1,138
Previous Cumulative (all sites under Base)	294,848	14,773
Base Cumulative (FY2009 to Date)	319,743	15,911



## **KEY ACCOMPLISHMENTS**

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

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

In Remote Mechanical A Line Room 235B, the cleanout of the large four level glovebox HA-23S continued and the first application of Aspigel chemical decontamination agent was completed for all four levels of HA-23S.

RMA Line Room 235A-1, in addition to completing the removal of internal process equipment from HA-14DC and HA-14CC, the external isolation of gloveboxes HA-14S, HA-14P, HA-14DC, and HA-14CC was completed.

In RMA Line Room 235A-3 the external isolation and removal of internal process equipment for gloveboxes HA-8A, HA-8B, HA-9C, HA-9D, and HA-9E was completed.

Bulk Area Cleanup activities for the lab continue. This involves removal of miscellaneous equipment and piping, which will prepare the lab area for demolition. Cleanup is scheduled for completion by the end of September, 2011.

Bulk Area Cleanup activities for the PPSL lab continue. This involves removal of miscellaneous equipment and piping, which will prepare the lab area for demolition. Cleanup is scheduled for completion by the end of September, 2011.

Bulk Area Cleanup activities for the Standards Lab commenced. This involves removal of miscellaneous equipment and piping, which will prepare the lab area for demolition. Cleanup is scheduled for completion by the end of September, 2011.

Process vacuum piping removal is 30 percent complete with 1,210 total feet removed.

A total of 535 feet of chemical piping transfer line has been removed.

345 feet of asbestos-containing materials on piping was removed during the month of August bringing the total to 14, 999 feet of asbestos removed to date.

The entire 2736-Z Complex was declared Cold and Dark; including buildings 2721-Z, 2731-ZA, 2736-Z, 2736-ZA, 2736-ZB and 2736-ZC.

2721-Z, 2731-ZA and 2736-ZC were declared Ready for Demolition.

Fabrication of two Low Profile SWB Transport Carts was completed.

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

As part of the Integrated (TRL-6) Test, testing of the final two (of a total of four) settler tank simulants was completed this month. Sludge treatment storage containers (STSCs) are loaded with each simulant, the simulants are retrieved, and the STSCs then checked for cleanliness. In this case, excellent cleanliness results were observed. In addition, initial review of the data from the post-test water runs indicate that there is no discernible difference in transfer and decant system flows and pressures after loading eight STSCs with simulant.

Revision 1 of the MCO Loading Plan for Found Fuel (OCRWM), KBC-48586, was approved and released. This revision was prepared to reflect combination of the found fuel payloads into a single MCO.

PRC-STP-00465, K Basin Sludge Treatment Project - Phase 2 Technology Evaluation and Alternatives Analysis, was released into IDMS on July 28 and formally transmitted to RL on August 1. This report documents the evaluation of technologies and processes for treating and packaging K Basin sludge and



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recommends further development of those that have a high certainty of successful deployment. This completes CHPRC scheduled Phase 2 activities for FY2011.

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

- Completed the KPP to ship 1,800 m3 Legacy M/LLW to a treatment facility. To date 1,978 m<sup>3</sup>
- MLLW: M-91-42/435.1- shipped 107 m<sup>3</sup> to processing and completed 59 m<sup>3</sup>
- MLLW: M-91-43- shipped 53 m<sup>3</sup> to processing and completed 127 m<sup>3</sup>
- Shipped the largest MLLW fiberglass-reinforced plywood (FRP) box totaling 64.5 m<sup>3</sup> from the Waste Retrieval Project (WRP) to Perma-Fix Northwest (PFNW)
- Completed ten (10) shipments of retrieved MLLW out of the 12B location to PFNW for treatment. To date, a total of 104 m<sup>3</sup>
- Removed 153 m<sup>3</sup> of CH-TRU waste from the trenches
- Shipped 191 m<sup>3</sup> of retrievably stored CH-TRU waste
- Vented 44 drums assaying TRU and x-rayed 47 drums in the Real-Time-Radiography System
- Processed 52 parent drums and created 113 offspring drums

Base

- The CWC completed three on-site shipments/transfers, 19 containers; and received 109 shipments/transfers, 1417 containers.
- Received six tankers (426K gallons)

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

ARRA

	А	ugust	Cumulative		
Activity	Planned	Completed	Planned	Completed	
Well Drilling (number of wells) –	0	0	303	303	
Well Decommissioning (# of wells) –	0	0	280	280	
100 DX Pump and Treat (P&T) –			100	100	
Construction/Startup (percent)	-	-	100	100	
200 West P&T – Final Design (percent)	-	-	100	100	
200 West P&T – Construction (percent)	6	6	88	94	
200 West P&T – Testing/Startup (percent)	8	8	90	88	

Base

• 71.3M gallons of groundwater treated total

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

• 200 West Area Groundwater Treatment Facility – KPP scope is 95% complete, with craft working two shifts, seven days a week to keep the installation of mechanical, electrical and process controls on schedule. Continued on schedule execution of 29 Construction Acceptance Tests (CAT): Five completed CATs with 24 Active CATs.



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

100-HX Groundwater Treatment Facility – The Construction Acceptance Tests (CATs) are complete. The Acceptance Test Procedure began on August 3, 2011 and is 25% complete. Final flange connection at well heads is complete, and resin loading of ion exchange vessels is in progress. Ranging and functional checks of plant instrumentation is on-going. Installation of the gravel apron at the Treatment Building is complete.

#### **Environmental Strategic Planning:**

- Completed initial scope discussions with the customer on the plan for sequencing geographical zone remediation activities, Contract Deliverable C.2.5.3-2. The annotated outline is being revised to reflect the discussions.
- Completed the review and categorization of EPA/Ecology comments on the "graded approach for protection of groundwater" document (Regulatory Basis and Implementation of a Graded Approach to Evaluation of Groundwater Protection, DOE/RL-2011-50). Met with representatives of both Agencies on the path forward for comment resolution and final revisions of the document are underway.

## 100-KR-4 Operable Unit – Base

• Operating KR-4, KW, and KX systems with 63 kg mass removed and 358 million gallons treated fiscal year to date. The SIR-700 resin loading was initiated at the first KW train.

#### 100-NR-2 Operable Unit - Base

• RI/FS well drilling and sampling activities initiated at wells C8190 and continued at well C8189. Drilling and sampling of well C8188was completed and well construction was completed at wells C8184 and C8188. Overall, drilling and sampling has been completed at five of the eight RI/FS wells.

#### 100-HR-3 Operable Unit - Base

• Comment incorporation has started on the 100-D/H RI/FS Report in order to prepare the Draft A document for submittal in November. TPA change notices were approved to authorize the drilling of the R5 replacement well at the 100-D-12 waste site in mid-September.

#### 100-FR-3 Operable Unit - Base

- Internal review comments on the RI/FS report were incorporated into a decisional draft document. The decisional draft document was provided to RL for review on August 25, 2011.
- Deep Vadose Zone Base
- Completed demobilizing the field equipment from the desiccation test site and continued with post operation rebound testing.

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

#### ARRA – U Plant/Other D&D

- U Canyon Demolition and Cell 30 Disposition
  - Continued grouting of the 221U Canyon facility process cells voids. Completed grouting of the electrical and piping galleries. Began grouting of the hot pipe trench. Continued preparation for grouting activities in the ventilation tunnel and ventilation duct to sand filter. Completed construction of the structural grout bulkheads for the rail tunnel.



- Completed the Cell Tank D-10 process vessel retrieval, loading and shipping.
- 209E Project
  - Removed Tank 231 and is ready to load out and have non-destructive analysis (NDA) performed.
  - Completed removal of Tank 106 and the associated wax from the CAR. Tank 106 is staged for placement of the glove bag to paint and begin cutting.

## ARRA – Outer Zone D&D

- BC Controlled Area (BCCA) Waste Site Remediation
  - As required by the Remedial Action Work Plan (RAWP), an On-Scene Coordinator Report is being published to document remedial actions performed and current status of the waste site. RL and the regulator comments have been incorporated. The document is on scheduled to be transmitted to RL and incorporated in the Administrative Record (AR) by the end of September.

## Base

- Beryllium sampling/characterization continued in B Plant and 231Z.
- Started roof repair at REDOX.

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

## ARRA

## Facilities

- Work was completed on the 105KE Reactor Building Disposition Site Preparation/Phase I Demolition ISS above-grade demolition of the West Annex.
- Project closeout continued on the 105KE Reactor Core Removal Final design.
- Completed Load out of 110KW Gas Storage Facility debris.
- Continued demolition of the 181KW River Pump House. The 165KE Power Control Building demolition planning continued; asbestos removal activities continued.

## Base

## Facilities

- Continued 105KE Reactor Disposition ISS engineering/planning activities for the design and construction of the Reactor Building SSE.
- Continued 105KE Tunnel decontamination and asbestos removal which was started early to support adjacent ARRA facility demolitions.

## Waste Sites

- Drafted Remaining Sites Verification Packages for waste sites 100-K-110
- Completed the Sampling for at the 183.4-KW and 183.4-KE Clearwells Sample results are being compiled and a report including the results is being drafted.



## **MAJOR ISSUES**

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

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

**Corrective Actions** – As a result of the failure on the EF-1 Fan in the 291-Z facility on August 29, 2011, resulting in loss of normal ventilation, activities in the radiological areas of the Plutonium Finishing Plant (PFP) remain restricted. As a result, there were no canyon entries to troubleshoot the failure of the canyon crane trolley. It is unknown as to when canyon entries will resume.

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

Impacts from workforce restructuring have the potential to delay KOP Operations. Impacts from "bump and roll" will not be known until layoffs are realized in September.

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

No major issues to report this month.

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

No major issues to report this month.

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

No major issues to report this month.

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

**Issue** – RL-0041 Waste Site Remediation will probably not be able to complete the remediation work scope tied to waste site 100-K-57 by December 31, 2012. The inability to complete this work by December 31, 2012, is being driven by the lack of an approved cultural resources mitigation action plan.

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

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

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

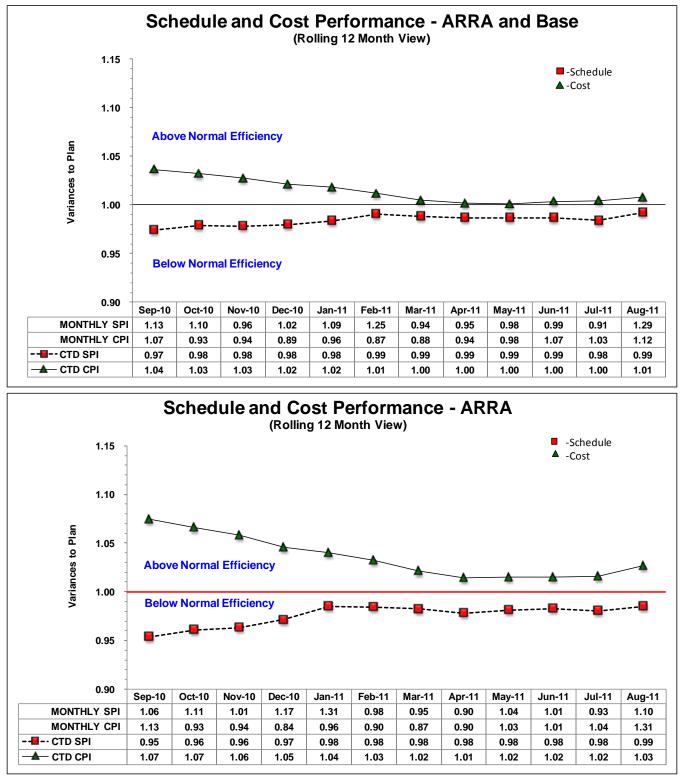
**Issue** – Roof leaks have developed that require repairs beyond normal patches.

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

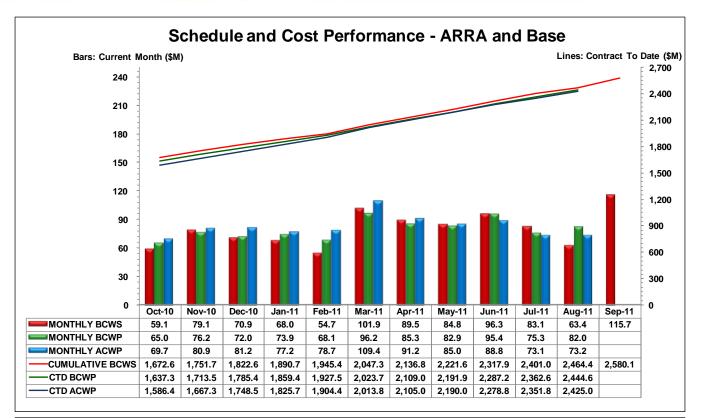
Status – The contract has been awarded and repairs began in August.

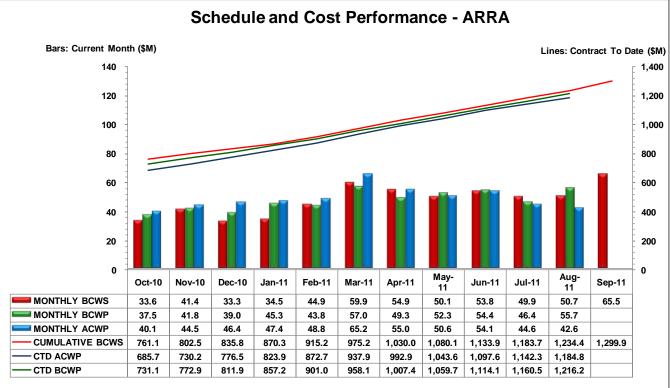


## EARNED VALUE MANAGEMENT











## Performance Analysis – August ARRA Performance by PBS

		\$M Current Period				
		Budget	ed Cost	Actual Cost	Varia	nce
		BCWS	BCWP	ACWP	Schedule	Cost
RL-0011 - PFP D&D		12.1	9.0	9.9	(3.1)	(0.9)
RL-0013 - MLLW Treatment		1.4	1.9	1.2	0.5	0.7
RL-0013 - TRU Waste		14.4	19.9	8.8	5.5	11.1
RL-0030 - Cleanup Operations		8.5	4.8	4.7	(3.7)	0.1
RL-0030 - Well Drilling Operations		3.6	4.8	5.7	1.2	(0.9)
RL-0030 - Support Operations		0.2	0.2	0.3	0.0	(0.1)
RL-0040 - U Plant/Other D&D		5.8	6.3	8.1	0.5	(1.8)
RL-0040 - Outer Zone D&D		1.8	0.7	(0.4)	(1.1)	1.2
RL-0041 - 100K Area Remediation		2.3	7.5	4.0	5.2	3.5
	Total	50.2	55.2	42.3	5.0	12.9

## ARRA

The Current Month favorable Schedule Variance: (+\$5.0M/+9.9%) reflects:

- The RL-0011 negative variance (-\$3.1M) is due to the following:
  - Primarily a result of delays in completing D&D of 234-5Z and deferred D&D work resulting from resources reassigned to focus on higher priority KPP glovebox removal work scope. The 234-5Z process and lab area D&D delays are a result of inability to staff the planned three shifts of overtime, more stringent radiological controls, new team ramp-up, workforce restructuring impacts and increased durations due to complexity of work associated with laboratory bulk area cleanout.
- The RL-0013 positive variance (+\$6.0M) reflects the following subproject performance:
  - RL-0013 MLLW Treatment (+\$0.5M) positive variance is due to schedule recovery for M-91-43 and M-91-42 waste, partially offset by 435.1 waste processing achieved in prior period.
  - RL-0013 TRU Waste (+\$5.5M) positive variance is due to implementation of a baseline change which deferred T-Plant Repack line, RH/Large Package Commercial Repack, WRAP Repack, TRU Characterization and Shipping to accommodate layup activities in preparation for FY2012 funding levels, partially offset by TRU waste shipments to PFNW completed in prior period, coupled with delay in TRU layup activities due to focus on ARRA KPP goals.
- The RL-0030 negative variance (-\$2.5M) that exceed the reporting thresholds reflect the following subproject performance:



- ARRA RL-0030.R1.1 Cleanup Operations (-\$3.7M) 200-ZP-1 OU 200W P&T construction is performing ahead of the baseline schedule. The negative variance in the current month is the result of previously completed work with BCWS.
- ARRA RL-0030.R1.2 Well Drilling Operations (+\$1.2M) 200-ZP-1 OU 200W P&T positive variance is due to early completion of business information modeling and early start on installation of heat trace.
- ARRA RL-0030.R1.3 Support Operations (\$+0.0M) positive variance is within threshold.
- The RL-0040 negative variance (-\$0.6M) is within reporting thresholds, reflected upon the following subproject performance:
  - ARRA RL-0040.R1.1 U Plant/Other D&D (+\$0.5M) positive variance is within reporting thresholds.
  - ARRA RL-0040.R1.2 Outer Zone D&D (-\$1.1M) negative variance is due to gains in the intentional deferral of work on waste sites outside of the footprint reduction zones (-\$0.8M) and earlier completion of scope associated with BC Control area. The Disposition of the railcars (-\$0.3M) negative variance was due to a minor issue with completing the final surveys. The surveys are complete and the project is in final close-out.
- The RL-0041 positive variance (+\$5.2M) is due to the following:
  - Waste Sites (+\$0.2M) The positive variance is due to accelerated progress in the field recovering previous months variance.
  - 100K Area Project (Facilities and Others) (+\$5.0M) The positive variance is due to the implementation of the FY2012 Annual PMB Update Baseline Change Request, "BCR-PRC-11-039R0."

The Current Month favorable Cost Variance (+\$12.9M/+23.5%) reflects:

- The RL-0011 negative variance (-\$0.9M) is due to the following:
  - Primarily a result of higher cost to execute the D&D 234-5Z work scope as a result of delays, difficulty, and encountered inefficiencies.
- The RL-0013 positive variance (+\$11.8M) is due to the following subproject performance:
  - RL-0013 MLLW Treatment (+\$0.7M) The positive variance is due to schedule recovery for M-91-43 without commensurate costs, coupled with delay in receipt of costs for M-91-42 completions.
  - RL-0013 TRU Waste (+\$11.1M) The positive variance is due to transfer of CWC Base and Min Safe Operations from Base to ARRA without associated costs (cost transfers in process), implementation of baseline change for T-Plant Repack, WRAP Repack and TRU Characterization and Shipping to accommodate layup activities in preparation for FY2012 funding levels without commensurate cost, coupled with delay in receipt of costs for repack layup activities, reduced labor rates due to a distribution of labor adder reductions.
- The RL-0030 negative variance (-\$0.9M) that exceed the reporting thresholds reflect the following subproject performance:
  - ARRA RL-0030.R1.1 Cleanup Operations (+\$0.1M) positive variance is within reporting threshold.



- ARRA RL-0030-R.1.2 GW Operations (-\$0.9M) 200-ZP-1 OU 200W P&T construction work costs in the period were greater than budgeted due to additional construction support/oversight resources and additional craft resources to complete tasks.
- ARRA RL-0030.R1.3 Support Operations (+\$0.0M) negative variance is within reporting thresholds.
- The RL-0040 negative variance (-\$0.6M) that reflects the following subproject performance:
  - ARRA RL-0040.R1.1 U Plant/Other D&D (-\$1.8M) The negative variance is within reporting thresholds.
  - ARRA RL-0040.R1.2 Outer Zone D&D (+\$1.2M) The positive variance is primarily due to a credit passback related to ERDF waste disposal costs (\$1.1M). This is offset by a negative variance in waste sites (-\$0.1M) related to extent of contamination in 216-S-19 and 216-S-26.
- The RL-0041 positive variance (+\$3.5M) is due to the following:
  - Waste Sites (+\$0.4M) The positive variance is from cost transfers processed during the month.
  - 100K Area Project Facilities and Others (+\$3.1M) The positive variance is due to the implementation of the FY2012 Annual PMB Update Baseline Change Request, "BCR-PRC-11-039R0."

	\$M				
	Current Period				
			Actual		
	Budget	ed Cost	Cost	Varia	nce
	BCWS	BCWP	ACWP	Schedule	Cost
RL-0011 - Nuclear Materials Stab & Disp PFP	2.5	2.1	2.9	(0.4)	(0.8)
RL-0012 - SNF Stabilization & Disposition	2.4	6.6	6.2	4.2	0.4
RL-0013 - Solid Waste Stab & Disposition	(3.1)	(0.8)	6.4	2.3	(7.2)
RL-0030 - Operations	8.8	9.5	9.7	0.7	(0.2)
RL-0030 - GW Remedy Implementation	3.7	3.6	2.3	(0.0)	1.3
RL-0040 - Nuc Fac D&D - Remainder	1.5	1.3	1.2	(0.2)	0.1
RL-0041 - Nuc Fac D&D - RC Closure Project	(2.8)	4.3	1.9	7.1	2.4
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.2	0.3	(0.0)	(0.1)
Total	13.2	26.8	30.8	13.7	(4.0)

## Base Performance by PBS

#### Base

The Current Month favorable Schedule Variance (+\$13.7M/+107.9%) reflects:

• The RL-0011 negative variance (-\$0.4M) is within reporting thresholds.



- The RL-0012 positive variance (+\$4.2M) is due to the following:
  - BCWS includes an adjustment in the current month due to implementation of BCR-PRC-11-039R0, FY2012 Annual PMB Update, which includes carryover scope form FY2011 to FY2012 for Engineered Container Retrieval and Transport System (ECRTS) design and technology readiness assessment and for KOP procurement and installation.
- The RL-0013 positive variance (+\$2.3M) is primarily due to implementation of a baseline change which deferred WESF Upgrades in preparation for FY2012 funding levels.
- The RL-0030 positive variance (+\$0.6M) The primary contributors that exceed the reporting thresholds reflect the following subproject performance:
  - RL-0030.01 RL 30 Operations (+\$0.7M) positive variance is due to the following:
    - Drilling (+\$1.2M) BCR-PRC-11-039 (FY2012 Annual PMB Update) identified one UP-1 extraction well and three ZP-1 wells for completion in FY2012 rather than FY2011. This resulted in a current month positive point adjustment in August. There is no expected impact to TPA milestones as a result of this change.
    - 100 HR-3 Operable Unit (-\$1.1M) 100HX P&T construction has performed work ahead of schedule, the negative variance is the result of realizing BCWS in the CM for work completed in previous periods.
  - RL-0030.C1 GW Remedy Implementation (-\$0.0M) negative variance is within reporting thresholds.
- The RL-0040 positive variance (+\$0.2M) is within reporting thresholds.
- The RL-0041 positive variance (+\$7.1M) is due the following:
  - Waste Sites (+\$3.7M) The positive variance is primarily due to effects of BCR-PRC-11-039R0 re-planning work in future fiscal years, but is partially offset by work completed ahead of schedule with performance taken in prior months.
  - 100K Area Project Facilities and Others (+\$3.4M) The positive variance is due to the implementation of the FY2012 Annual PMB Update Baseline Change Request, "BCR-PRC-11-039R0."
- The RL-0042 positive variance (+\$0.0M) is within reporting thresholds.

The Current Month favorable Cost Variance (+\$0.4M/+1.8%) reflects:

- The RL-0011 negative variance (-\$0.8M) is due to higher G&A cost. An administrative error resulted in an over distribution of G&A, which contributes (+\$0.5M) to the variance. The balance is due to a debit pass-back resulting from G&A pool liquidation.
- The RL-0012 positive variance (+\$0.4M) Combined STP and 100K variance is within thresholds.
- The RL-0013 negative variance (-\$7.2M) is due to transfer of CWC Base and Min Safe Operations from Base to ARRA without associated costs (cost transfers in process), increased assessments and higher G&A than planned.



- The RL-0030 positive variance (+\$1.1M) The primary contributors that exceed the reporting thresholds reflect the following subproject performance:
  - o RL-0030.01 RL 30 Operations (-\$0.2M) negative variance is due to the following:
    - PBS RL-30 Regulatory Decisions & Closure Integration (+\$0.3M) The two primary drivers for the underrun are efficiencies obtained in completing outer area work scope and over reporting of performance for the IS-1 baseline. The status will be corrected in September and the project will remain with a positive CTD cost variance.
  - RL-0030.C1 GW Remedy Implementation positive variance (+\$1.3M) is within reporting thresholds:
    - 200-ZP-1 Operable Unit (+\$1.1M) A pump setting truck and two tractors were received in August and the corresponding cost from MSA will not be received until September. Additional efficiencies were obtained in the current month operations and maintenance activities of the existing ZP-1 Pump and Treat.
- The RL-0040 positive variance (+\$0.1M) is within reporting thresholds.
- The RL-0041 positive variance (+\$2.4M) is primarily due to the following:
  - Waste Sites (+\$4.3M) The positive variance is due to additional performance taken to better align with progress in the field partially offset by cost transfers processed during the month.
  - 100K Area Project Facilities and Others (-\$2.0M) The negative variance is due to the implementation of the FY2012 Annual PMB Update Baseline Change Request, "BCR-PRC-11-039R0."
- The RL-0042 negative variance (-\$0.1M) is within reporting thresholds.



## Performance Analysis – Contract to Date ARRA Performance by PBS

		\$M						
		Contract to Date				Contract Period		
				Actual				
		ted Cost	Cost	Varia				
	BCWS	BCWP	ACWP	Schedule	Cost	BAC	EAC	Variance
RL-0011 - PFP D&D	258.2	245.4	250.7	(12.9)	(5.3)	287.3	271.3	16.0
RL-0013 - MLLW Treatment	45.6	43.6	38.8	(2.1)	4.8	50.1	43.2	6.8
RL-0013 - TRU Waste	233.1	235.5	226.6	2.4	8.9	255.5	251.3	4.2
RL-0030 - Cleanup Operations	165.9	167.1	169.1	1.2	(2.0)	175.0	178.0	(3.0)
RL-0030 - Well Drilling Operations	36.0	38.2	35.8	2.1	2.4	40.7	38.0	2.7
RL-0030 - Support Operations	34.6	34.6	35.0	(0.0)	(0.4)	34.9	35.2	(0.2)
RL-0040 - U Plant/Other D&D	188.8	184.0	177.4	(4.8)	6.6	199.6	189.3	10.3
RL-0040 - Outer Zone D&D	86.7	83.1	69.5	(3.6)	13.6	89.4	72.2	17.3
RL-0041 - 100K Area Remediation	169.5	168.9	167.1	(0.6)	1.8	178.3	178.5	(0.2)
	Total 1,218.5	1,200.3	1,170.0	(18.2)	30.3	1,310.9	1,256.9	54.0

## ARRA

The CTD unfavorable Schedule Variance (-\$18.2M/-1.5%) reflects:

- The RL-0011 negative variance (-\$12.9M) is within reporting thresholds.
- The RL-0013 positive variance (+\$0.3M) is due to the following subprojects:
  - RL-0013 MLLW Treatment (-\$2.1M) Delay in receipt of M-91-42 feed from TRU Retrieval, coupled with delay of M-91-43 returns (receiving facility processing higher priority waste), partially offset by accelerated shipments of 435.1 waste.
  - RL-0013 TRU Waste (+\$2.4M) Baseline adjustment which deferred RH/Large Package Commercial Repack, T-Plant Repack line, WRAP Repack, TRU Characterization and Shipping to accommodate layup activities in preparation for FY2012 funding levels, coupled with TRU Retrieval accelerated Point of Generation (POG) commercial processing, partially offset by delay of TRU Retrieval layup activities due to focus on ARRA KPP goals.
- The RL-0030 positive variance (+\$3.3M) is due to the following subproject performance:
  - RL-0030.R1.1 Cleanup Operations (+\$1.2M) The positive variance can be attributed to 200-ZP-1 Operable Unit 200W P&T variance is the result of managing the primary contractor to an accelerated completion date.
  - RL-0030.R1.2 Well Drilling Operations (+\$2.1M) The positive variance is due to 200-ZP-1 Operable Unit 200W P&T early completion of business information modeling and early start on installation of heat trace.
  - ARRA RL-0030.R1.3 Support Operations (-\$0.0M) The negative variance is within threshold.



- The RL-0040 negative variance (-\$8.4M) primary contributors that exceed the reporting thresholds are as follows:
  - RL-0040.R1.1 U Plant/Other D&D (-\$4.8M) negative variance is due to late award of the grout contract for U Canyon (-\$2.7M), delays with the hazard reduction of 209E (-\$0.9M), and limited resources has also delayed 200W Administration Buildings (-\$1.6M). Also, minor accounts outside the threshold (-\$0.1M).
  - RL-0040.R1.2 Outer Zone D&D (-\$3.6M) negative variance is primarily due to the waste sites in ARRA that need to be moved to base to support the priority of footprint reduction (-\$3.7M), which is offset by the ahead of schedule disposition of the 212N railcars (+\$0.1M).
- The RL-0041 negative variance (-\$0.6M) is due to the following:
  - Waste Sites (+\$0.0M) The positive variance is within reporting thresholds.
  - o 100K Area Project (-\$0.6M) The negative variance is within reporting thresholds.

The CTD favorable cost variance (+\$30.3M/+2.6%) reflects:

- The RL-0011 negative variance (-\$5.3M) is within reporting thresholds.
- The RL-0013 positive variance (+\$13.7M) reflects the following subproject performance:
  - RL-0013 MLLW Treatment (+\$4.8M) The positive variance is due to Mixed Low Level Waste costs below plan due to efficiencies created by treating waste at Energy Solutions (ES) Clive rather than planned treatment at PermaFix Northwest (PFNW) due to a waiver received from the Department of Energy (DOE), ERDF negotiated rate reduction with vendor for waste containers, decreased operations costs at Low Level Burial Grounds (LLBG), efficiencies in Large Type A waste container shipments to PFNW and in Mixed Waste Disposal Trenches (MWDT) upgrades, partially offset by higher costs for ETF Containment Berm repairs.
  - RL-0013 TRU Waste (+\$8.9M) The positive cost variance due to efficiencies in TRU Characterization and Shipping, CWC (scope moved from Base to ARRA without associated costs - cost transfers in process), TRU Repackaging, T-Plant and WRAP, partially offset by increased materials and labor costs in support of the Trench Face Retrieval and Characterization System (TFRCS), coupled with increased resources for TRU Retrieval deteriorated waste containers.
- The RL-0030 positive variance (+\$0.0M) reflects the following subproject performance:
  - RL-0030.R1.1 Cleanup Operations (-\$2.0M) negative variance can be attributed to the following:
    - 100-HR-3 Operable Unit (-\$0.9M) 100DX is the result of increased installation costs on the pH adjustment system, the impacts of weather on completing construction punch-list items, and the Acceptance Test Plan for the facility/process.
    - 200-ZP-1 Operable Unit (-\$0.7M) modifications in design of Long Lead Equipment (LLE) procurements.
  - RL-0030.R1.2 Well Drilling Operations (+\$2.4M) positive variance is due to efficiencies and savings obtained in drilling for 100-NR-2 and 200-BP-5 wells. Cost efficiencies have been obtained through an aggressive drilling schedule with savings in support personnel and faster drilling methods. Well decommissionings have also been completed for less than planned.



- ARRA RL-0030.R1.3 Support Operations (-\$0.4M) negative variance is due to the following:
  - Regulatory Decision and Closure Integration (+\$1.7M) is due to completing work scope more efficiently than planned, primarily in the areas of multi-incremental sampling (using existing documentation and direct haul rather than staging), and borehole drilling and landfill characterization (competitive subcontracting of drilling support and efficient field support).
  - Ramp-up and Transition (-\$2.1M) negative variance was driven by increased Project Services Distribution to RL-0030.
- The RL-0040 positive variance (+\$20.2M) reflects the following subproject performance:
  - ARRA RL-0040.R1.1 U Plant/Other D&D (+\$6.6M) The favorable cost variance is largely due to favorable performance of the Cold and Dark teams and the Sampling and Characterization/Waste Identification Form teams (D4) (+\$4.2M), overhead allocations (+\$10.5 M), less for Program Management than planned (+\$2.4M), less resources than planned for C-3 Sampling (+\$0.7M), lower than planned costs for capital equipment (D4) (+\$3.0M), less asbestos abatement required for 200W buildings (+\$3.3M), offset by increased material and equipment costs, increased use of masks and respirators due to the unexpected asbestos levels in the ancillary buildings in U Ancillary (D4) (-\$8.0M), coupled with increased insulator staff and overtime to recover schedule, 200E Administration (-\$1.2M) and 209E Project delays (-\$3.0M), additional resources being applied at U Canyon (D4) to regain schedule (-\$2.3M), Usage Based Services (-\$2.9M), and minor accounts not within threshold (-\$0.1M).
  - ARRA RL-0040.R1.2 Outer Zone D&D (+\$13.6M) The favorable cost variance is due to efficiencies in Arid Lands Ecology (ALE), North Slope Facilities, disposition of railcars D&D (+\$7.2M), and Outer Area waste sites (+\$7.5M). The waste site favorable cost-to-date variance is primarily due to an O-Zone Remove, Treat, and Dispose (RTD) Waste Sites adjustments (pass back) to ERDF waste disposal costs reflecting the operational efficiencies of the super dump trucks. Within the waste sites area, this favorable cost variance is partially offset by higher than planned costs associated with remediation of pipelines. A negative cost variance is associated with increased costs for the 212N/P/R Project (-\$1.1M) due to the walls of the basins being much thicker than estimated.
- The RL-0041 negative variance (-\$1.7M) is due to the following:
  - Waste Sites (+\$8.0M) The positive cost variance is due to CSNA sites that were completed at less than anticipated cost. This is partially offset by greater than anticipated extent and severity of contamination on many waste sites resulting in more tons disposed and more controls required, thus higher than anticipated cost.
  - 100K Area Project (-\$10.8M) The negative cost variance is due to numerous design changes and additional punch list items in the Utilities Reroute project; the project has been utilizing more vehicles and equipment than was planned and Project Management continues to overrun due to increase charges for labor and materials.



	\$M							
		Co	ontract to D	ate		C	ontract Pe	riod
			Actual					
	Budget	ted Cost	Cost	Varia	nce			
	BCWS	BCWP	ACWP	Schedule	Cost	BAC	EAC	Variance
RL-0011 - Nuclear Materials Stab & Disp PFP	152.8	151.3	153.6	(1.5)	(2.3)	344.8	367.0	(22.1)
RL-0012 - SNF Stabilization & Disposition	240.2	239.7	242.5	(0.5)	(2.8)	605.5	605.1	0.4
RL-0013 - Solid Waste Stab & Disposition	295.3	295.0	311.7	(0.3)	(16.7)	1,597.4	1,607.4	(10.0)
RL-0030 - Operations	359.1	357.8	364.8	(1.4)	(7.1)	1,223.5	1,231.4	(7.9)
RL-0030 - GW Remedy Implementation	56.4	55.5	49.9	(0.8)	5.6	78.9	76.5	2.4
RL-0040 - Nuc Fac D&D - Remainder	65.0	64.8	57.8	(0.1)	7.1	733.2	725.6	7.6
RL-0041 - Nuc Fac D&D - RC Closure Project	65.4	68.6	64.1	3.2	4.6	350.3	338.9	11.4
RL-0042 - Nuc Fac D&D - FFTF Project	11.7	11.6	10.6	(0.1)	1.0	25.6	24.4	1.2
Total	1,245.9	1,244.4	1,255.0	(1.5)	(10.7)	4,959.2	4,976.3	(17.2)

## Base Performance by PBS

Base

The CTD unfavorable Schedule Variance (-\$1.5M/-1.2%) reflects:

- The RL-0011 negative variance (-\$1.5M) is within reporting thresholds.
- The RL-0012 negative variance (-\$0.5M) the combined 100K and STP variances are within reporting thresholds.
- The RL-0013 negative variance (-\$0.3M) is within reporting threshold. The negative variance is due to Canister Storage Building (CSB) engineering activities delayed due to resource availability (assigned to higher priority activities); partially offset by accelerated WRAP high-efficiency particulate air (HEPA) filter replacement (scheduled for FY2013).
- The RL-0030 negative variance (-\$2.2M) reflects the following subproject performance:
  - o RL-0030.01 RL 30 Operations (-\$1.4M) The negative variance is within reporting threshold.
  - RL-0030.C1 GW Remedy Implementation (-\$0.8M) The negative variance is within reporting threshold.
- The RL-0040 negative variance (-\$0.1M) is within reporting thresholds.
- The RL-0041 positive variance (+\$3.2M) is due to the following:
  - Waste Sites (+\$3.7M) The positive variance is due to CSNA sites that were completed ahead of schedule partially offset by delays related to demolition of the 105KE Fuel Storage Basin discharge chute and the 100K Area utility switchover.
  - o 100K Area Project (-\$3.8M) The negative variance is within reporting thresholds.
- The RL-0042 negative variance (-\$0.1M) is within reporting thresholds.



The CTD unfavorable Cost Variance (-\$10.7M/-1.0%) reflects:

- The RL-0011 negative variance (-\$2.3M) is within reporting thresholds.
- The RL-0012 negative variance (-\$2.8M) The combined 100K and STP variances are within reporting thresholds.
- The RL-0013 negative variance (-\$16.7M) is due to:
  - Increased assessments above plan, transfer of CWC Base and Min Safe Operations from BASE to ARRA without associated costs (cost transfers in process), TRU Retrieval additional resources to deal with deteriorated containers and drum wedge issue, FY09 WRAP facility increased levels of corrective and preventive maintenance activities as a result of repack operations, increased labor and subcontractors support for Transportation and Packaging; partially offset by efficiencies in Liquid Effluent Facility (LEF), MLLW, TRU Disposition, TRU Repackaging, Interim Storage Area upgrades, Capsule Storage and Disposition, Mixed Waste Disposal Trenches (MWDT) and lower G&A allocations.
- The RL-0030 negative variance (-\$1.4M) primary contributors that exceed the reporting thresholds are as follows:
  - RL-0030.01 RL 30 Operations (-\$1.4M) The negative variance can be attributed to:
    - Integration & Assessments (+\$3.8M) Less subcontractor support required for Central Plateau strategy development and integration, Sample Management and Reporting has performed work scope more efficiently than planned, less cleanup document reviews were required than originally planned, requiring less contract support. Also efficiencies/savings were realized in establishing document templates, reviewing procedures, and software procurements.
    - Drilling (-\$1.7M) Radiological contamination encountered on two NR-2 wells has caused additional HPT delays and additional support resource requirements (HPTs). Also, in order to recover schedule and complete the wells by the end of the fiscal year additional well drilling rigs have been used, resulting in overruns to the project.
    - 100-NR-2 OU (+\$1.7M) Chemical treatment and maintenance scope, jet grouting pilot test work, RI/FS Work Plan and Interim Proposed Plan Reporting were performed more efficiently than planned leading to the positive cost variance.
    - 100 HR-3 Operable Unit (-\$2.9M) Primary contributors to the negative cost variance are due to 100 DX extensive effort required to design the pH adjustment system, cost overruns in completing the OU Remedial Process Optimization studies, 100 DX unplanned modifications on the system after completion of construction and higher than expected cost to complete acceptance test plan and the operational test plan, cost of realigning wells from DR-5 to 100 DX, 100 HX Construction cable cost increased due to increases in copper prices and additional time and resources being spent on internal CERCLA (RI/FS) document development that will be recovered in completed Draft A document.
    - 200 PW-1 OU (+\$0.8M) Labor and subcontract cost for general operations and minor modifications support is less than planned. In addition, efficiencies and savings experienced with the Soil Vapor Extraction (SVE) system testing prior to March 2010 as well as the removal of two old SVE units.
    - Usage Based Services (-\$1.5M) Increased cost associated with training due to the additional ARRA work in FY2010 and fleet services costs that occurred in FY2009 and FY2010. Overruns will continue to be funds-managed within the S&GRP project.



- RL-0030.C1 GW Remedy Implementation (+\$5.6M) the positive variance can be attributed to:
  - 200-ZP-1 Operable Unit (+\$4.6M) Major contributors are Interim Operations reflects significant progress and cost underruns achieved to date for System Calibration, design of the permanent hookup of well EW-1 was lower than planned as only minor changes were needed to an existing design, cost for performing general operating and maintenance and minor modification activities have been lower than planned as the system has been running smoothly, cost for collecting depth-discrete groundwater and soil samples during the installation of new wells was less than planned, 200W Pump-and-Treat Remedial Design/Remedial Action work plan and preliminary design activities were completed with fewer resources than planned and delivery of one pump setting truck and two tractors not yet invoiced by MSA.
- The RL-0040 positive variance (+\$7.0M) is primarily due to recognized efficiencies for demolition of the Industrial 7 Project (D4) (+\$0.6M) as a result of utilization of existing site equipment and materials, surveillance and maintenance costs (D4) less than expected (+\$1.9M), completion of the sampling of Cell 30 with less resources than planned (+\$0.9M), Program Management utilizing less resources (+\$1.5M), capital equipment (+\$0.3M), Usage Base Services (+\$0.2M), and underrun in overhead allocations (+\$1.8M).
- The RL-0041 positive variance (+\$4.4M) cost variance is within established reporting thresholds. The project is currently experiencing impacts associated with:
  - Waste Sites (+\$9.1M) The positive variance is due to CSNA sites that were completed at less than anticipated cost. This is partially offset by greater than anticipated extent and severity of contamination on many waste sites resulting in more tons disposed and more controls required, thus higher than anticipated cost, as well as level-of-effort activities bearing additional costs for increased functional group support.
  - o 100K Area Project (Facilities and Others) (-\$2.7M) The negative variance is within threshold.
- The RL-0042 positive variance (+\$1.0M) reflects reduction in surveillance and maintenance requirements as the facility deactivation reached completion. Efficient use of resources to support deactivation activities with available time further aided in creating this favorable cost variance.



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

		FY 2	2011	
PBS	Project	Projected Funding	Spending Forecast	Variance
<b>RL-0011</b>	Nuclear Materials Stabilization and Disposition	163.1	133.9	29.3
<b>RL-0013</b>	Waste and Fuels Management Project	162.5	153.7	8.8
RL-0030	Soil, Groundwater and Vadose Zone Remediation	157.6	157.4	0.2
<b>RL-0040</b>	Nuclear Facility D&D, Remainder of Hanford	142.6	135.5	7.1
<b>RL-0041</b>	Nuclear Facility D&D, River Corridor	67.7	62.6	5.1
	Total ARRA:	693.6	643.1	50.6
RL-0011	Nuclear Materials Stabilization and Disposition	41.6	35.5	6.1
<b>RL-0012</b>	Spent Nuclear Fuel Stabilization and Disposition	87.6	76.8	10.7
<b>RL-0013</b>	Waste and Fuels Management Project	85.6	83.9	1.8
RL-0030	Soil, Groundwater and Vadose Zone Remediation	181.9	165.5	16.4
<b>RL-0040</b>	Nuclear Facility D&D, Remainder of Hanford	18.5	17.6	1.0
<b>RL-0041</b>	Nuclear Facility D&D, River Corridor	51.4	34.1	17.4
<b>RL-0042</b>	Fast Flux Test Facility Closure	2.4	2.1	0.3
	Total Base:	469.0	415.4	53.7

## **Funds/Variance Analysis:**

Funding Increase of \$3.7M associated with CHPRC requested re-rack to meet emerging issues and RL directed changes for K Basin Spent Nuclear Fuel Stabilization and Disposition associated with the Sludge Treatment Project.



## **BASELINE CHANGE REQUESTS**

In August 2011, CHPRC approved and implemented two (3) baseline change requests (BCRs), of which one (1) is administrative in nature and did not change budget, schedule or scope. The three change requests are briefly identified in the table below:

Change Request #	Title	Summary of Change
I	mplemented into the	Earned Value Management System for August 2011
BCR-PRC-11- 039R0	FY2012 Annual PMB Update	In accordance with Section C.3.1.2.2 of the Contract Statement of Work and consistent with the RL guidance provided in RL letter 11-PIC-0037, "Contract No. DE-AC06-08RL14788 – Transmittal of Target Profile for Baseline Implementation", dated July 8, 2011 (see Attachment 1 of the change request), this change request incorporates the first stage of the annual PMB update (Deliverable C.3.1.2.2-2) into CHPRC's earned value management system for August 2011 reporting. This first stage of the annual PMB update focuses solely on fiscal year (FY) 2012. While FYs 2013-2018 are included in the Primavera <sup>TM</sup> schedule for this first stage annual PMB update, only a limited discussion is provided on the out years in this change request (see Summary of Changes). Consistent with RL letter 11-PIC-0037, detailed planning on work scope in FYs 2013-2018 is deferred to the 2 <sup>nd</sup> stage annual PMB update to be provided in a separate change request by November 30, 2011. Also, the PFP Closure Project is not included in this change request. Per discussions with RL, the lifecycle resource loaded schedule, cost profile and qualitative/quantitative risk assessment for the PFP Closure Project will be submitted on September 20, 2011, with the basis of estimate and supporting documentation to be included in the 2 <sup>nd</sup> stage annual PMB update on November 30, 2011, which includes lifecycle data for all PBSs. A summary description of, and reason for, the change is provided in the Executive Summary of this change request; specific details are contained in fourteen (14) other Sections of the change request. No additional funding is required in FY 2012 as a result of this change request. Management reserve values are proposed in FY 2012 and reflect consideration of the updated risk register and in consideration of items identified in Section 10. A full risk analysis using the Pertmaster® risk management software will be conducted following completion of the FY2012 through FY 2018 life-cycle update. If that analysis determines adjustments are requir



Change Request #	Title	Summary of Change
BCR-PRC-11- 040R0	Workforce Restructuring per Revised DOE-HQ Guidance	This change request incorporates into the CHPRC performance measurement baseline (PMB) revised guidance for the allocation of the severance related portion of workforce restructuring (WFR) as directed by RL in DOE RL letter 11-FMD-0092, dated July 5, 2011 (Attachment 1) and also incorporates refined estimates based upon actual number of Self Selects and the projected cost impacts associated with the specific Worker Adjustment and Retraining Notification Act Notice (WARN Notices) issued on August 1, 2011. There is a reduction to the overall FY 2011 budget as a result of this change request. Specifically, DOE RL Letter 11- FMD-0092 requires CHPRC to allocate the WFR budget, and corresponding costs, to available American Recovery and Reinvestment Act (ARRA) or Base funding sources based on the employee's years of service under each funding source. This approach differs from the original DOE RL guidance (see change request BCR-PRC-11-021R0, "Transfer of Workforce Restructuring to ARRA Only", dated April 22, 2011) that all WFR be budgeted, and costed, only to ARRA funding. Prior costs to ARRA for workforce restructuring are point adjusted to align to the new approach if needed. The process for the calculation and the calculation estimate of severance costs between ARRA and Base was developed by CHPRC Finance (see Attachment 2 of change request). The refined estimate, based on the actual number of Self Selects and WARN Notices, results in a required budget of \$7,363K for ARRA and \$11,056K for Base. There is a reduction of \$2,204K in the Mission Support Alliance (MSA) budget and a reduction of s7,028K in the CHPRC budget. In order to accommodate the impact of distributing WFR cost to Base, work scope currently planned and executed in Base (RL-13 and RL-41) has been identified for movement to ARRA, consistent with the Project Operating Plans (POPs). The prior cost is moved retroactive from October 1, 2010, resulting in a current period point adjustment in August 2011. The RL authorization to move the identified Base sc
BCRA-PRC-11- 043R0	Administrative & Schedule Coding Changes for August 2011	The following administrative changes are made in August 2011: (1) This change request adjusts PFP coding as follows in Attachment 1: The two Cold & Dark milestones for breathing air trailers 2711B1 and 2711B2 are moved from Base to American Recovery & Reinvestment Act (ARRA); (2) This change request adds codes to the Project Grouping Global code field to existing PMB activities to better group like scope. This change also adds additional coding to existing activities to better define the scope alignment to the Not-to-Exceed limit values approved by DOE. This change impacts PBSs RL-0030, RL-0040 and RL-0041. See Attachment 2 for the new Project Grouping Codes and corresponding P6 schedule



Change Request #	Title	Summary of Change
		activities; (3) This change request also adds a new WBS Level 2, 041.04, and sublevel WBS elements as required for the FY 2012 Annual PMB Update. The Level 2 WBS, and sublevel WBSs, are identified in Attachment 3. Authorization to create this new WBS Level 2 structure is provided in Attachment 4; (4) This change request documents the addition of a new level 5 WBS, 041.02.03.01.12, "[S] 1720K Structure". This new facility is added to American Recovery & Reinvestment Act (ARRA) scope in the 100 K Area in change request BCR-PRC-11-039R0, "FY2012 Annual PMB Update'. Also, the 1717K and 1717AKE structures are moved from Base to ARRA in change request BCR-PRC-11-039R0. RL authorization is anticipated through a contracting officer – see Attachment 5 for the e-mail authorizing these changes as made in BCR-PRC-11- 039R0. Global CIN code BCR-PRC-11-039R0.B – Move all FY2011 Scope & Costs for 1717K, 1717AKE and 1720K Structures from Base to ARRA. The presentation attached to the e-mail is available upon request; (5) New coding to the P6 schedule for August 2011 is added to identify Contract Modification 182, Change Order #107coding for new S/SX scope definitized in Change Order #107 (Attachment 6). The new CIN Global code is: BCR-PRC-11-039R0.A, "Mod 182 – Definitization of CO 107, Addition of S-SX Interim Groundwater Extraction System". The four schedule activities to which the coding is applied are identified in Attachment 7; and, (6) Approved HPIC changes for August 2011 are provided in Attachment 9. There is no change to budget or scope as a result of this change request. No additional funds are required and no management reserve is used.

Overall the contract period performance measurement baseline (PMB) budget is *decreased* \$16.4 million in August 2011.

In August 2011 management reserve (MR) is *used* in the amount of \$1,490.8K in fiscal year (FY) 2011 due to a realized risk (see BCR-PRC-11-040R0, "Workforce Restructuring per Revised DOE-HQ Guidance"), but is also *adjusted downward* by \$2,825.0K in FY 2012 to reflect consideration of the updated risk register and in consideration of conditions identified in Section 10, BCR-PRC-11-039R0, "FY2012 Annual PMB Update", for an overall *reduction* of \$4,315.8K.



The MR *used* in FY 2011 is due to realized risk D4-042, "Unexpected Site Conditions – D4", in project baseline summary (PBS) RL-0041 associated with the D4 of structures 1706-KE and 1706-KER, which is American Recovery & Reinvestment Act (ARRA) scope. The management reserve *adjusted* in FY2012 as a result of BCR-PRC-11-039R0 is shown below by funding type and the applicable PBS along with the MR used in FY2011 due to realized risk D4-042:

BCR Number	Title	Fiscal Year	MR Used (ARRA) & PBS	MR Adjusted (Base) & PBS			
BCR-PRC-11-040R0	Workforce Restructuring per Revised DOE-HQ Guidance	2011	(\$1,490.8K) / RL-41				
BCR-PRC-11-039R0	FY2012 Annual PMB Update	2012		(\$1,000.0K) / RL-12			
				(\$2,500.0K) / RL-13			
				\$7,669.0K / RL-30			
				(\$3,823.0K) / RL-40			
				(\$3,165.1K) / RL-41			
				(\$5.6K) / RL-42			
MR Cha	MR Change (FYs 2011 and 2012) (\$1,490.8K) (\$2,825.0K)						
Overall MR Change in August 2011 – (\$4,315.8K)							

### Management Reserve Adjusted in FYs 2011 & 2012

Fee is also adjusted in August 2011 based on the reduced FY2012 work scope in accordance with the reduced FY2012 funding as documented in change request BCR-PRC-11-039R0, "FY2012 Annual PMB Update". The overall fee in FY2012 is *reduced* by \$4,631.5K and is shown below by funding type and the applicable PBS:

#### Fee Adjusted in FY2012

BCR Number	Title	Fee Adjusted (ARRA) & PBS	Fee Adjusted (Base) & PBS
BCR-PRC-11-039R0	FY2012 Annual PMB Update		\$1,337.0K / RL-12
			(\$2,603.9K) / RL-13
			\$258.8K / RL-30
			(\$3,336.3K) / RL-40
			(\$322.3K) / RL-41
			\$35.2K / RL-42
	(\$4,631.5K)		



The reduced FY2012 fee was not re-spread to the out years since out year planning will not be complete until Stage 2 of the FY2012 Annual Update consistent with RL letter 11-PIC-0037, "Transmittal of Target Profile for Baseline Implementation", dated July 8, 2011. See the Format 3 Report in Appendix A and A-1 for a complete listing of the specific change requests and the impact on the PMB budget by fiscal year. The change to the Estimated Contract Price, if all authorized, un-priced work scope were definitized at the PMB values as a result of change requests processed in August 2011, is *reduction* of \$25.3 million and is summarized by fiscal year in the tables below (dollars in thousands, negative number represents reduction):

August	t 2011 Su	mmary of	<sup>r</sup> Changes	to Estim	ated Contract	Price
	FY2009	FY2010	FY2011	FY2012	FYs 2009-2013	FYs 2014-2018
July 2011 Estimat	ted Contra	ct Price				
PMB	653,426	960,017	1,023,273	727,983	3,925,026	2,361,369
Mgmt Rsrv (MR)	0	0	25,965	23,499	80,690	155,220
Fee	39,712	48,772	32,322	21,600	159,927	87,417
Total	693,138	1,008,790	1,081,560	773,082	4,165,643	2,604,006
Change by Fundi	ng Source	to Estimate	d Contract I	Price in Au	gust 2011 (3 BC.	Rs)
РМВ						
ARRA						
All ARRA WBSs	0.0	0	-16,964	7,650	-9,315	0
Base						
All Base WBSs	0	0	-14,022	-270,951	-135,353	128,295
Change to PMB	0	0	-30,986	-263,302	-144,668	128,295
MR						
ARRA						
All ARRA WBSs	0	0	-1,491	0	-1,491	0
Base						
All Base WBSs	0	0	0	-2,825	-2,825	0
Change to MR	0	0	-1,491	-2,825	-4,316	0
Fee						
ARRA						
All ARRA WBSs	0	0	0	0	0	0
Base						
All Base WBSs	0	0	0	-4,631	-4,631	0
Change to Fee	0	0	0	-4,631	-4,631	0
Total Change	0	0	-32,477	-270,758	-153,615	128,295
August 2011 Estin	nated Con	tract Price				
РМВ	653,426	960,017	992,287	464,681	3,780,358	2,489,664
MR	0	0	24,474	20,674	76,374	155,220
Fee	39,712	48,772	32,322	16,969	155,296	87,417
Total	693,138	1,008,790	1,049,083	502,324	4,012,028	2,732,301

August 2011 Summary of	of Changes to	Estimated (	<b>Contract</b> Price
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	Chunge	s to/Utilizat	-	-		_	
		FY2009	FY2010	FY2011	FY2012	FY2009-2013	FY2014-2018
Managem	ent Reserve (MR) - En	d of July 2011		-			1
ARRA	RL-0011.R1	0	0	2,981	0	2,981	0
	RL-0013.R1.1	0	0	0	0	0	0
	RL-0013.R1.2	0	0	51	0	51	0
	RL-0030.R1.1	0	0	0	0	0	0
	RL-0030.R1.2	0	0	0	0	0	0
	RL-0040.R1.1	0	0	4,369	0	4,369	0
	RL-0040.R1.2	0	0	0	0	0	0
	RL-0041.R1	0	0	8,608	0	8,608	0
	ARRA Total	0	0	16,009	0	16,009	0
Base	RL-0011	0	0	2,000	7,400	17,400	0
	RL-0012	0	0	3,000	3,000	10,500	16,800
	RL-0013	0	0	1,500	3,000	9,500	55,530
	RL-0030	0	0	0	2,650	7,050	32,000
	RL-0040	0	0	3,242	4,023	12,244	31,900
	RL-0041	0	0	214	3,365	7,866	17,990
	RL-0042	0	0	0	61	121	1,000
	Base Total	0	0	9,956	23,499	64,681	155,220
	MR Total	<u> </u>	0	25,965	23,499	80,690	155,220
Changes t	o/Utilization of Mana	gement Reserv	e in August 201		,	,	
ARRA	RL-0011.R1	0	0	0	0	0	0
	RL-0013.R1.1	0	0	0	0	0	0
	RL-0013.R1.2	0	0	0	0	0	0
	RL-0030.R1.1	0	0	0	0	0	0
	RL-0030.R1.2	0	0	0	0	0	0
	RL-0040.R1.1	0	0	0	0	0	0
	RL-0040.R1.1 RL-0040.R1.2	0	0	0	0	0	0
	RL-0040.R1.2 RL-0041.R1	0	0	-1,491	0	-1,491	0
	ARRA Total	0	0	-1,491	0	-1,491	0
Base	RL-0011	0	0	0	0	0	0
Dusc	RL-0012	0	0	0	-1,000	-1,000	0
	RL-0013	0	0	0	-2,500	-2,500	0
	RL-0030	0	0	0	7,669	7,669	0
	RL-0040	0	0	0	-3,823	-3.823	0
	RL-0041	0	0	0	-3,165	-3,165	0
	RL-0042	0	0	0	-6	-6	0
	Base Total	0	0	0	-2,825	-2,825	0
	MR Total	0	0	-1,491	-2,825	-4,316	0
Managem	ent Reserve - End of A		0	1,171	<b>_</b> ;0 <b>_</b> 0	1,010	, , , , , , , , , , , , , , , , , , ,
ARRA	RL-0011.R1	0	0	2.981	0	2,981	0
	RL-0013.R1.1	0	0	0	0	0	0
	RL-0013.R1.1 RL-0013.R1.2	0	0	51	0	51	0
	RL-0015.R1.2 RL-0030.R1.1	0	0	0	0	0	0
	RL-0030.R1.1 RL-0030.R1.2	0	0	0	0	0	0
	RL-0030.R1.2 RL-0040.R1.1	0	0	4,369	0	4,369	0
	RL-0040.R1.1 RL-0040.R1.2	0	0	4,309	0	4,309	0
	RL-0040.R1.2 RL-0041.R1	0	0	7,117	0	7,117	0
	ARRA Total	0	0	14,518	0	14,518	0
Base	RL-0011	0	0	2.000	7,400	17,400	0
Buse	RL-0011 RL-0012	0	0	3,000	2,000	9,500	16,800
	RL-0012 RL-0013	0	0	3,000 1,500	500	7,000	55,530
	RL-0015 RL-0030	0	0	1,500	10,319	14,719	32,000
	RL-0030 RL-0040	0	0	3,242	200	8,421	32,000
	RL-0040 RL-0041	0	0				
	RL-0041 RL-0042	0	0	214	200 55	4,701 115	17,990 1,000
	Base Total	0	<u> </u>	9,956	20,674	61,856	155,220
		0	0				
	MR Total	U	U	24,474	20,674	76,374	155,220

## Changes to/Utilization of Management Reserve in August 2011



## SELF-PERFORMED WORK

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

Contract-to-Date Actual Awards & Mods							Projection through	FY18	
		Planned Subcontracting*	\$2,524,483,195						
		Cont	Contract-to-Date Awards =	\$1,716,288,532					
Reporting	ARR	A	Non-A	RRA	Total	Percent of	Goal	Balance Remaining to Award =	\$808,194,663
Classification	(\$)	%	(\$)	%	(\$)	Total	(%)	Goal Award (\$)	Bal. to Goal (\$)
SB	\$396,519,127	52.32%	\$461,247,316	48.13%	\$857,766,443	49.98%	49.30%	\$1,244,570,215	\$386,803,772
SDB	\$78,397,454	10.34%	\$78,075,234	8.15%	\$156,472,688	9.12%	8.20%	\$207,007,622	\$50,534,934
SWOB	\$86,431,082	11.40%	\$85,411,493	8.91%	\$171,842,574	10.01%	6.50%	\$164,091,408	(\$7,751,167)
HUB	\$20,085,301	2.65%	\$20,106,119	2.10%	\$40,191,420	2.34%	3.20%	\$80,783,462	\$40,592,042
VOSB	\$60,685,885	8.01%	\$37,293,899	3.89%	\$97,979,784	5.71%	2.00%	\$50,489,664	(\$47,490,120)
SDVO	\$12,916,261	1.70%	\$14,635,650	1.53%	\$27,551,911	1.61%	2.00%	\$50,489,664	\$22,937,753
NAB	\$15,019,022	1.98%	\$9,047,739	0.94%	\$24,066,761	1.40%	0.00%	*10-year subcontracting projection	
Large	\$240,026,724	31.67%	\$271,278,271	28.31%	\$511,304,994	29.79%	0.00%		
GOVT	\$114,276	0.02%	\$1,326,409	0.14%	\$1,440,685	0.08%	0.00%	PRC clause H.20 small business	(SB) requirement:
GOVTCONT	\$121,172,754	15.99%	\$221,477,436	23.11%	\$342,650,189	19.96%	0.00%	>17% of Total Contract Price performed by SB	
EDUC	\$8,815	0.00%	\$102,181	0.01%	\$110,996	0.01%	0.00%	Total Contract Price:	\$5,363,111,740
NONPROFIT	\$36,948	0.00%	\$2,805,546	0.29%	\$2,842,493	0.17%	0.00%	17% requirement:	\$911,728,996
FOREIGN	\$28,773	0.00%	\$140,582	0.01%	\$169,355	0.01%	0.00%	Awarded:	\$857,766,443
Total	\$757,907,416		\$958,381,116		\$1,716,288,532			Balance to Requirement:	\$53,962,553

Notes:

 Performance through August 2011 continues to exceed goals in the Disadvantaged Business, Woman Owned, and Veteran Owned categories and lag goals for HUB zone and Service Disabled Veteran business awards. Forty-nine percent of total awards have been made to small businesses with approximately 52% of ARRA awards to small businesses.

- 2. ARRA-funded awards have accounted for approximately 44% of all actions placed since contract inception.
- 3. Approximately 93% of the total dollars arise from service and staffing Contracts and Contract amendments with five percent of the dollars arising from P-Card purchases and the balance from purchase orders for materials and equipment.
- 4. This report excludes blanket contract values which are only estimates and not used for payment obligations.
- 5. Data is summarized by business categories (Women Owned Minority Business Enterprise codes) in accordance with socioeconomic reporting requirements. Small business categories overlap and should not be added together.

## **GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)**

Contract Section	Project	GFS/I	Status
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.	Ongoing

