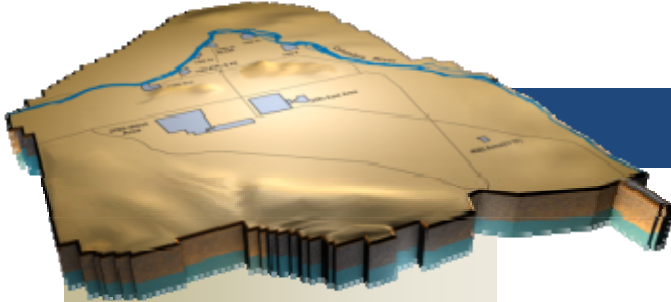


ARRA Weekly Report



Week Ending July 23, 2010

July 27, 2010
Contract DE-AC06-08RL14788
Modification M047
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Contents

OVERVIEW.....	3
ACCOMPLISHMENTS.....	4
RL-0011 Nuclear Materials Stabilization & Disposition.....	4
RL-0011.R1: Plutonium Finishing Plant D&D.....	4
RL-0013 Solid Waste Stabilization & Disposition.....	5
RL-0013C.R1.1: MLLW Treatment.....	10
RL-0013C.R1.2: TRU Waste.....	10
RL-0030 Soil & Groundwater Remediation, Groundwater/Vadose Zone.....	12
RL-0030.R1: Central Plateau Soil & Groundwater.....	16
RL-0040 Nuclear Facility D&D – Remainder of Hanford.....	18
RL-0040.R1.1: U Plant/Other D&D.....	18
RL-0040.R1.2: Outer Zone D&D/Waste Sites.....	20
RL-0041 Nuclear Facility D&D – River Corridor Closure Project.....	23
RL-0041.R1.1: 100K Area Remediation.....	24
UPCOMING EVENTS.....	29
RL-0011 Nuclear Materials Stabilization & Disposition.....	30
RL-0013 Solid Waste Stabilization & Disposition.....	30
RL-0030 Soil & Groundwater Remediation, Groundwater/Vadose Zone.....	30
RL-0040 Nuclear Facility D&D – Remainder of Hanford.....	31
RL-0041 Nuclear Facility D&D – River Corridor Closure Project.....	31

OVERVIEW

CH2M HILL Plateau Remediation Company (CHPRC) is using funds from the American Recovery and Reinvestment Act (Recovery Act) to accelerate cleanup and demolition efforts across the Central Plateau and along the river corridor to help pursue the U.S. Department of Energy (DOE) 2015 vision and shrink the Hanford Site cleanup footprint.

RL-0011 Nuclear Materials Stabilization & Disposition

CHPRC is accelerating critical decontamination and decommissioning (D&D) work to prepare the Plutonium Finishing Plant (PFP) for demolition three years ahead of the Tri-Party Agreement milestone of September 2016. The work scope includes removing over 180 glove boxes/laboratory hoods and other highly contaminated equipment from the 234-5Z, 242-Z, and 2736-ZB buildings as well as preparing the former special nuclear material storage structures and other ancillary buildings for demolition.

RL-0013 Solid Waste Stabilization & Disposition

Recovery Act funds are allowing CHPRC to accelerate retrieval of 2,500 m³ of suspect transuranic (TRU) waste, eliminate 1,800 m³ of mixed low-level and low-level waste (MLLW and LLW), and accelerate the overall cleanup of legacy waste and fuels on the Hanford Site.

RL-0030 Soil & Groundwater Remediation, Groundwater/Vadose Zone

In the ongoing effort to protect the Columbia River, CHPRC is using Recovery Act funding to construct two groundwater treatment facilities, install over 300 wells that will be used for monitoring, extracting, and remediating groundwater, and decommission 350 wells that are no longer of service.

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

Across the Central Plateau and along the outer zone of the Hanford Site, CHPRC is accelerating the demolition of facilities to reduce mortgage costs on buildings that are no longer of service and complete the remediation of waste sites.

RL-0041 Nuclear Facility D&D – River Corridor Closure Project

In the 100K Area along the Columbia River, CHPRC is demolishing 12 buildings and remediating waste sites to clear the area and prepare for the disposition of two reactors, K East and K West.

ACCOMPLISHMENTS

RL-0011 Nuclear Materials Stabilization & Disposition

RL-0011.R1: Plutonium Finishing Plant D&D

The following table summarizes progress made with Recovery Act funding at PFP since April 2009.

Structures, equipment, waste disposition	Total to Date
Glove boxes/hoods removed	66 glove boxes/hoods
MLLW/LLW shipped	1,220 m ³
TRU shipped	151 m ³
Non-radioactive waste shipped	22 m ³
Asbestos removed	-9,725 feet
Ancillary structures demolished or removed	<ul style="list-style-type: none"> • 17 fuel vaults/ancillary buildings prepared for demolition: <ul style="list-style-type: none"> ○ 8 fuel vaults disposed ○ 2 structures removed for reuse elsewhere

Six waste shipments were made from PFP last week, including eight fuel vaults and two roll-off containers shipped to the Environmental Restoration Disposal Facility (ERDF) for disposal as LLW. Two Standard Waste Boxes of TRU waste were shipped to the Waste Receiving and Processing Facility, and two shipments of MLLW drums were shipped to Perma-Fix Northwest (PFNW) for treatment.



Photo 1

Two fuel storage vaults that have spent years in position outside the Plutonium Finishing Plant are bound for the Environmental Restoration Disposal Facility where they will be disposed of as low-level waste.

Laboratory & Processing Areas

In the former Analytical Laboratory, all chemical waste items have been removed from hoods 5 through 9 in room 144, and the 30 items remaining in hoods 1 through 4 have been sampled. Work documents are being finalized to begin work on removal of hoods 5 through 8. In the Plutonium Process Support Laboratory, external isolations continued on the glove box in room 180, work planning continued for cleanout and removal of nine glove boxes/hoods in room 179, and a location-specific Beryllium Work Permit was developed and issued for work in rooms 179 and 188. In the process areas, gross decontamination of the 70-foot-long conveyor glove box HA-28 was completed. Non-destructive assay (NDA) measurements and other preparations for chemical decontamination were then initiated on glove boxes HA-28, HA-21I, and HA-20MB. Work resumed to enlarge the 638 doorway, which is a prerequisite for removing three large glove boxes from room 230C.

2736-Z/ZB Vault Complex

The vault D&D crew initiated preparation of 20 welded but empty DOE-STD-3013 containers for disposal and began disposition of excess portable equipment from room 641. The D&D crew who was temporarily transferred from the Plutonium Reclamation Facility to the vault complex began sealing large and heavy pieces of equipment out of the six glove boxes in room 642, with the aid of the new, larger load-out port installed several weeks ago. The radiological characterization report on the vault complex was completed and more than 100 procedures have been modified in preparation for transitioning the complex from the current material storage Documented Safety Analysis (DSA) to the PFP D&D DSA. The residual inventory of plutonium held up in the process and ventilation areas and systems was documented to be less than 400 grams.

242-Z Americium Recovery Facility

The 242-Z team completed change-out of the inlet filters for ventilation of the control room. The ventilation system is still not generating sufficient differential pressure from external areas to support highly intrusive work; the exhaust filters in the duct level of the 234-5Z building will need to be replaced. The team also completed the installation of lead shielding on glove box WT-2 in the control room, successfully reducing dose rates in front of the glove box from several hundred millirem per hour to less than 15 millirem per hour. The team continued applying contamination fixative in the control room, as well as walk-downs and development of work documents for electrical and mechanical isolation of the building.

Ancillary and Security Structures

Eight of the 15 PFP fuel storage vaults originally scheduled for disposition in late 2012 have now been shipped to ERDF for disposal as LLW. The remaining seven vaults are scheduled to be shipped over the next two weeks. Work also continued on electrically and mechanically isolating three larger buildings formerly used to control access to PFP. These three facilities, as well as two other ancillary structures already transferred to the CHPRC D&D Project are scheduled to be readied for demolition by mid-August - two years ahead of schedule. Removal of the inner Protected Area fences, razor wire, and perimeter alarm systems continued, with the entire west side perimeter now complete.

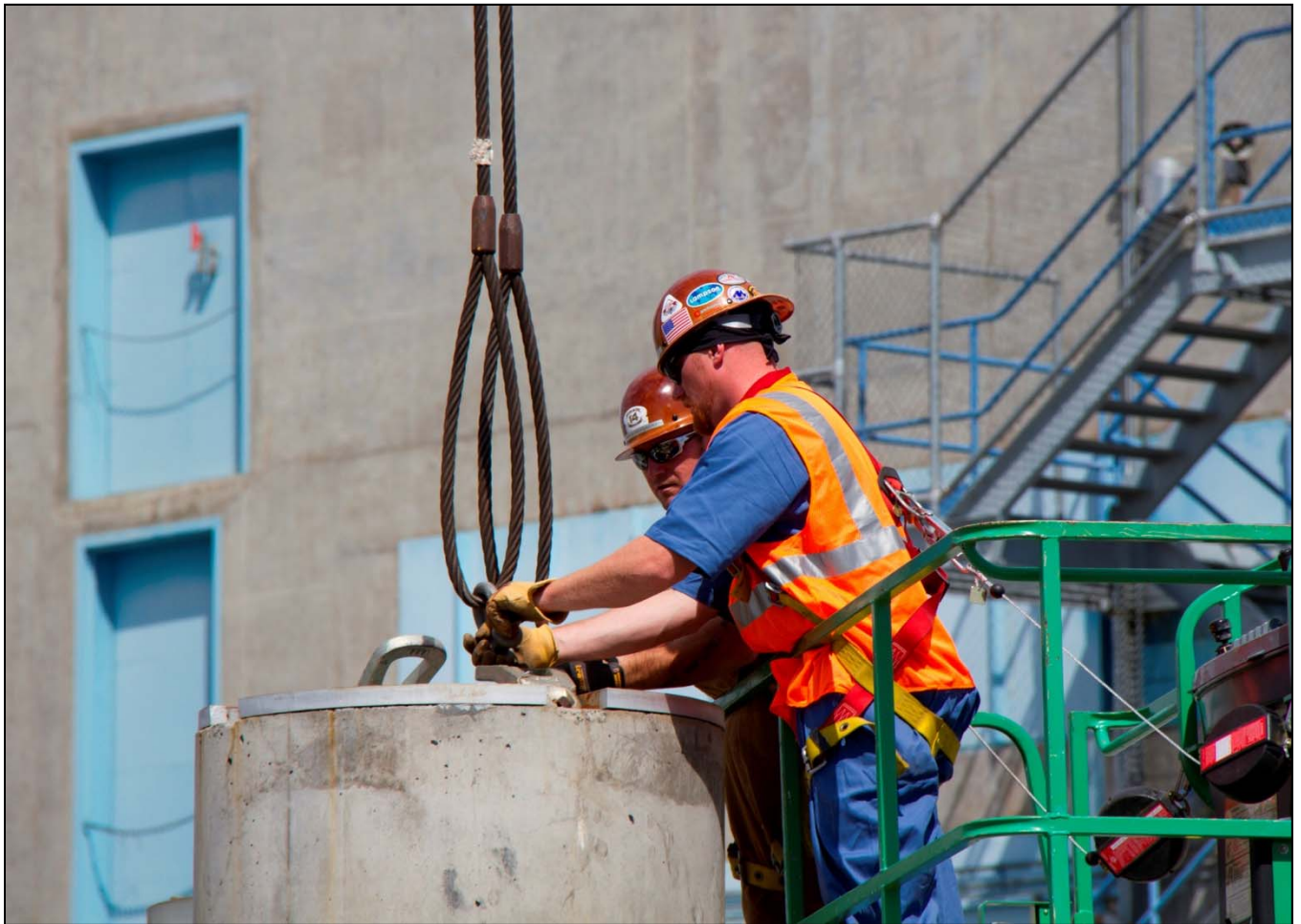


Photo 2

Workers secure a fuel storage vault for lifting and loading for shipment to the Environmental Restoration Disposal Facility. This is one of 15 fuel storage vaults that CHPRC is removing from the Plutonium Finishing Plant with Recovery Act funding to clear the PFP Complex of ancillary structures.



Photo 3

Outside of the Plutonium Finishing Plant, a crane lifts a fuel storage vault. Last week, a total of eight vaults were loaded onto trucks and shipped to the Environmental Restoration Disposal Facility for disposal as low-level waste.



Photo 4

Workers prepare the base to secure a fuel storage vault for shipment to the Environmental Restoration Disposal Facility. Last week, CHPRC removed eight vaults from the Plutonium Finishing Plant (PFP) for disposal as low-level waste. Since April 2009, CHPRC has used Recovery Act funding to remove or demolish 10 structures from PFP; seven more vaults are scheduled for removal over the next two weeks.



Photo 5

A section of razor wire that once surrounded the Plutonium Finishing Plant perimeter is loaded into a container for disposal. CHPRC is removing the inner Protected Area fences, razor wire, and perimeter alarm systems as part of the Recovery Act-funded effort to prepare the complex for demolition. Removal of the entire west side perimeter is complete.

Infrastructure, process support systems, and equipment removal

The Stop Work resulting from the discovery of unexpected contamination in the duct level of the 234-5Z building was resolved. Planning and preparations to install a new vacuum gauge were completed, and removal of 5,500 feet of the highly contaminated process vacuum system piping is scheduled to begin next week. NDA measurements are complete for 67 percent of the vacuum lines and 35 percent of the process transfers lines running throughout the facility. Asbestos removal work resumed following incorporation of new beryllium and radiological controls in various work documents. Approximately 244 feet of insulation was removed from steam lines in room 321 in preparation for an upcoming steam outage. Non-asbestos containing insulation will be reinstalled following the outage.

Final cleanup and adjustments to the new air conditioning system are under way; full cooling capability is available and in use throughout the process facilities providing relief from heat stress in radiological areas. Work on many of the facility modification projects has resumed, including enlarging two doorways to support removal of larger glove boxes from the former process areas. Work is also continuing on the installation of a size-reduction station for glove boxes/hoods in room 172, and in-situ size-reduction capability in the Analytical Laboratory. Work to grout six pipe chases below the first floor of the 234-5Z

building remains on hold while the subcontractor completes beryllium training and medical qualifications and while work documents are revised to add appropriate beryllium controls.

RL-0013 Solid Waste Stabilization & Disposition

RL-0013C:R1.1: MLLW Treatment

Of the 1,800 m³ of MLLW and LLW planned for shipment under the Recovery Act:

- 988 m³ of MLLW and LLW have been shipped to date including:
 - 776 m³ that have been treated and disposed.
 - 212 m³ at off-site treatment facilities awaiting processing. Treatment is scheduled for FY10.

Two shipments were sent out this week on July 22 from the Central Waste Complex (CWC) to PFNW. The first shipment contained six drums (1.2 m³) of LLW debris that will be volume-reduced and stabilized. The second shipment contained one drum (0.2 m³) of MLLW non-debris that will be non-thermally treated by stabilization. Both shipments will be packaged for disposal in Hanford's Mixed Waste Disposal Units.



Photo 6

CHPRC personnel prepare to load six drums containing low-level waste debris into a transportation vehicle. This shipment is leaving the Central Waste Complex and is headed to Perma-Fix Northwest where it will be volume-reduced, stabilized, and packaged for disposal in Hanford's Mixed Waste Disposal Units.

RL-0013C:R1.2: TRU Waste

Of the 2,500 m³ of suspect TRU waste planned for retrieval under the Recovery Act:

- 57 m³ are staged, pending shipment.
- 478 m³ have been shipped to a treatment, storage, or disposal facility.

The Waste Retrieval Project continued work in the 3A burial grounds by completing site preparation for the Trench 8 work package and beginning site preparation activities for the planned retrieval in the trench. Excavation procedures SW-100-201 and -202 were also completed along with revisions to retrieval procedure SW-100-163. The fogging of Box 82 for contamination control was completed and fiberglass-reinforced plywood walls and sheet pilings were removed from the box as well.

An elevated geophysical survey was conducted in the 4B burial grounds in Trench 11. The Simulation Test Site (STS) Trench was prepared for a mock-up and the initial enhanced work planning meeting of the excavator interrogation of 4B Trench 11's off-normal event site was conducted. Backfilling and down-posting of contamination areas (CAs) in 4B Trench 7 continued. In the 12B burial grounds, the operation test procedure (OTP) for the Gamma Assay Unit was completed and the informal functional check on the conveyor system was also completed.

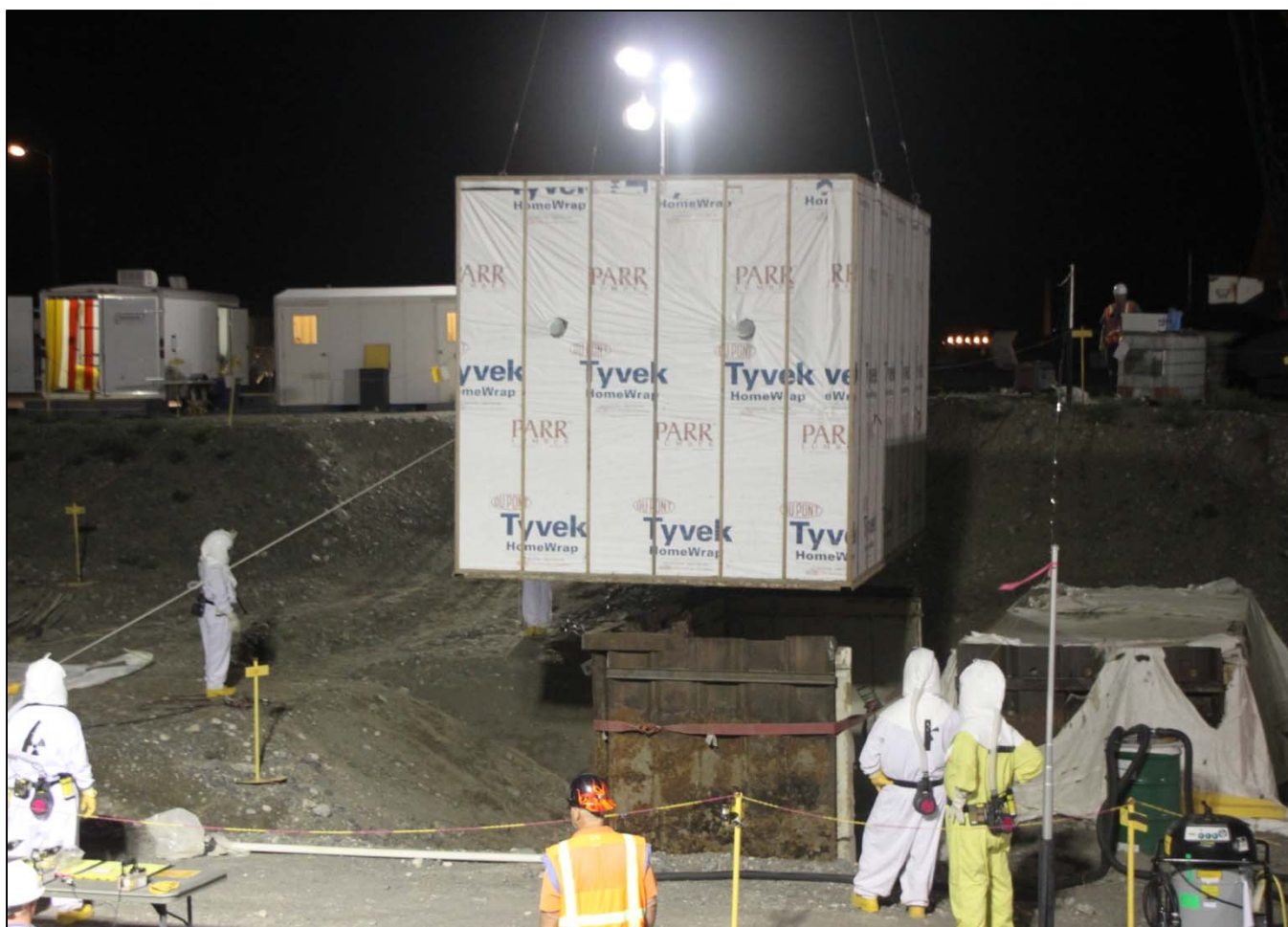


Photo 7

Riggers remove the temporary cover box from Box 82 in 3A Trench 17 in preparation for removing the fiberglass-reinforced plywood box walls and sheet piling. The cover box was used to protect Box 82 from adverse weather.



Photo 8

A radiological control technician surveys the fiberglass-reinforced plywood box wall on Box 82 prior to removal.

Alpha Caisson Retrieval Project

Recommendations were presented to the Waste and Fuels Management Project on the Remote Retrieval System contract award. Closeout efforts are complete with the exception of downloading files to the Integrated Document Management System.

K-1/K-3 Filter Replacement

The K-1/K-3 filters are a high efficiency particulate air (HEPA) filter exhaust system at the Waste Encapsulation Storage Facility (WESF) that require upgrades. The HEPA filters in the K-1 exhaust system do not meet the HEPA filter testing requirements of ASME N510. The HEPA filters located in the K-3 exhaust filter housings have surpassed the generally accepted life expectancy of HEPA filters located within a confinement ventilation system. The K-3 HEPA filters are more than 18 years old and WESF, a storage place for cesium and strontium capsules, is expected to operate through 2017; therefore upgrading these systems is necessary.

Upgrading the systems will provide fully compliant exhaust systems. The filter housings, filters, exhaust fans, and stack will be replaced and then tied into the existing underground duct of the existing filters. The conceptual design and final design will be funded through Recovery Act funds, but the procurement and construction planned for this project will be funded through CHPRC base funds.

Last week project management participated in a job walk-down in support of an estimate development for

proposal to DOE. Comments were incorporated from the internal review on the statement of work (SOW) for the conceptual design report (CDR) and a field execution schedule for FY10 CHPRC activities was developed. Technical editing was completed on the project execution plan (PEP); the plan was then routed for CHPRC internal review and comments. The functional design criteria are approximately 80 percent complete and a meeting was held with the WESF Engineering team to review outstanding issues that require their input.



Photo 9

Underground K-3 HEPA filter pits are shown in foreground and the K-1 HEPA filter is located above ground in a concrete structure in the background. With Recovery Act funding, CHPRC will complete the conceptual and final design to upgrade these filters.



Photo 10

The existing K-1 and K-3 exhaust fans and common stack.

TRU Project Drum Repackaging

Of the 850 m³ planned to be characterized and repackaged with funding from the Recovery Act:

- 1,626 drums (338.3 m³) have been repackaged.
- 62 TRUPACT-II shipments [1,343 55-gallon drums, 24 standard waste boxes (SWBs), two ten-drum over-packs, 156 85-gallon over-packs and 246 drums over-packed into 65 SWBs (410.3 m³ total)] have been shipped.



A ten-drum over-pack (TDOP), typically used for shipping ten 55-gallon drums, is modified and prepared to be loaded with four 85-gallon over-packs. Three TDOPs make up one TRUPACT-II shipment.

Photo 11

RL-0030 Soil & Groundwater Remediation, Groundwater/Vadose Zone**RL-0030.R1: Central Plateau Soil & Groundwater***Well Drilling & Decommissioning*

The following table showcases additional progress in well drilling and decommissioning.

Operable Unit	Scope (Wells to be drilled with Recovery Act funding)	In progress	Drilled to Total Depth ¹	Completed or Developed ²
100-BC-5	Support characterization and removal of chromium (6 wells)	1	-	-
100-KR-4	Support characterization of the vadose zone and aquifer (13 wells)	4	3	2
100-HR-3	H Area: Support the optimization of removal of chromium (40 wells)	39	30	29
200-ZP-1	Support the 200 West Groundwater Treatment Facility that will primarily treat carbon tetrachloride contamination in the groundwater (17 wells)	16	12	11
300-FF-5	Support characterization of the aquifer (11 wells)	1	-	-
Site-wide	Decommission wells that are no longer of service ³ (350 wells)			170

¹Wells are drilled to varying depths to address contaminants at different depths in the soil.

²When a well is developed, the well screen and riser pipe are placed in the hole, filter pack material is placed around the screen, and the well has been surged and pumped to establish good communication between the well and the surrounding soil.

³Wells that are inactive or no longer of service are filled with grout or other materials, the casing is removed, and a cap or marker is installed.



Photo 12

A drilling crew installs a well in the 100-BC-5 operable unit, where a total of six wells will be installed with Recovery Act funding to support characterization and removal of chromium contamination in the groundwater.

200 West Groundwater Treatment Facility

The 200 West Groundwater Treatment Facility general contractor, Skanska USA Build Inc. and their subcontractors have conducted form work associated with the final four footings at the Radiological Facility, including a concrete placement conducted on July 21, 2010. Additionally, work was initiated for the deep sumps and footings for the main process building.

Subcontractor George A. Grant continued working site preparations for the four transfer buildings. Construction of road crossings remains on hold until drilling is complete, material procurement was initiated for sleeves and piping as the project moves road crossing activities into the area of the S/SX tank farms. Excavation permitting was initiated for the second phase of road crossings.



Photo 13

Foundation concrete work continues in the 200 West Area, where CHPRC is constructing the 200 West Groundwater Treatment Facility, a Recovery Act project that will help expand and enhance groundwater treatment efforts at the Hanford Site.

DX Groundwater Treatment Facility

Electrical, mechanical, and process equipment installations in the DX facilities are nearly complete. The progress is listed below.

Building	Electrical Equipment (% complete)	Mechanical Equipment (% complete)
Process	99%	100%
Transfer (M1)	100%	100%
Transfer (M2)	100%	100%
Chemical Addition	20%	20%
Electrical Power Rack Tie-In		95%
HDPE Piping Installation		100%

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

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

U Canyon

Following the completion of equipment disposition, focus turned to preparation for grouting. Bids are being evaluated for grout delivery and conveyance. Baseline radiological surveys in the canyon are 80 percent complete. Work instructions are being prepared for core drilling operations, water feed connections, and electrical supply modifications. The core drilling affords access to the less accessible areas that need to be grouted. Water and electrical work are required to supply the grout batch plant. Work is complete on upgrades to the facility elevator. Work began on roof repairs to alleviate water intrusion. Sampling of unknown chemicals is being scheduled. Asbestos abatement activities continued. Awarding of a contract for fabrication of a cask to ship the D-10 tank to T Plant is progressing.

U Plant Ancillary Facilities

Demolition and debris load-out continued on the 224-U building. Demolition of the 224-UA building was initiated last week with the removal of some of the high hold-up items.



Photo 14

Demolition continues on the 224-U ancillary facility. With removal of this facility well under way, demolition also began last week on the 224-UA building, the last of the five U ancillary facilities to be demolished.

200 East Core Industrial Area

Erection of the containment in the main 284-E Powerhouse and asbestos abatement activities in the conveyor and crusher house continued. Demolition activities at the 272-E Fabrication Shop continued with the demolition and debris load-out of the office portion and removal of siding.



Photo 15

More siding was removed from the 272-E Fabrication Shop in preparation for demolition of the internal structures.

200 West Area Industrial Facilities

Planning and characterization activities continued in preparation for the demolition of six industrial structures in the 200 West Area. Sampling of the 284-W Powerhouse continued and radiological surveys began for all six structures.

209-E Criticality Mass Laboratory

Removal of the perimeter fencing continued. Radiological surveys of piping and miscellaneous equipment in the Critical Assembly Room and Mix Room were completed. Work documents are being prepared to support the installation of temporary power to the facility and for housekeeping of contaminated items.

RL-0040.R1.2: Outer Zone D&D/Waste Sites

Arid Lands Ecology Reserve (ALE) D&D

Demolition of the 6652-C Space Science Laboratory continued and is nearly complete to slab on grade. Facility isolation and characterization of the T520-6 Navy MARS Radio Station and 6630 Hodges Well Pump House continued. Debris site cleanup continued with removal of an aged vehicle from the side of Rattlesnake Mountain. The vehicle rolled from the upper ALE Reserve in the 1970s; the cause of the roll is unknown but no one was injured. Due to the steep, uneven terrain of the mountainside, the vehicle was

removed using a helicopter to reduce worker and environmental risks. The vehicle was located in a culturally sensitive area in a steep ravine where it would be very difficult for workers and heavy equipment to access, size reduce, and haul out the debris. The vehicle was relocated to the lower reserve where it will be size reduced and loaded for disposal. In total since demolition and debris site removal began at the reserve earlier this year, CHPRC has removed 95 percent of all debris sites and removed nearly 30,000 square feet of facilities from the outermost area of the Hanford Site.



Photo 16

A close-up of the sky crane that was used to lift a vehicle debris site from the side of Rattlesnake Mountain at the upper Arid Lands Ecology Reserve at the Hanford Site. CHPRC used the helicopter technology to limit risks to workers and the environment while removing the vehicle, which has been on the mountainside since the 1970s.



Photo 17

A damaged truck is carried via sky crane from the side of Rattlesnake Mountain to the lower Arid Lands Ecology Reserve. The vehicle rolled from the upper reserve in the 1970s. Today, it is considered a debris site that CHPRC is removing with Recovery Act funding to clear the area of facilities and debris. The helicopter allowed the truck to be removed from the mountainside while reducing risks to workers and impacts to the culturally sensitive area.

North Slope Debris Removal

Planning, development of environmental documents, and cultural reviews continued for removal of debris from the North Slope on the Hanford Site.

Waste Sites

The following table showcases CHPRC's recent progress in removing contaminated soil from waste sites in the outer zone.

Waste Site in Progress	Tons of Contaminated Soil Removed	
	<i>Week Ending July 23, 2010</i>	<i>Total to Date</i>
BC Control Area	2,500	156,800

Recent activities regarding the outer zone waste sites also includes (listed by operable unit or site):

- *200-MG-1*
 - 216-S -26: ERDF profile sampling was completed. Samples were analyzed and the waste profile is being developed. The scoping walk-downs are complete, culture/ecology reports are complete, and the contract SOW is in procurement for processing.
 - 600-36: Samples are being analyzed.
 - 600-38: The excavation is complete, pending confirmatory sampling.
 - 600-40: Excavation is on hold, pending process sampling.
 - 600-222: The Confirmatory Sample No Further Action sample instruction has been issued and sample data review indicates that a small amount of retrieve, treat, and disposal (RTD) activity is required. An Advanced Work Authorization has been generated and is in the approval cycle. The MG-1 Remedial Action Work Plan needs to be approved prior to the start of excavation.
 - 600-226: Preliminary results indicated RTD will be required. The MG-1 Remedial Action Work Plan needs to be approved prior to the start of excavation.
 - 600-228: Surface sampling is complete; direct push testing will commence after UPR-600-12.
 - 600-275: Excavation was deferred due to nesting birds in proximity to the waste site.
 - OCSA (Old Central Shop Area): Sampling activities continued; surface sampling of the first four areas is complete.
 - Planning for RTD activities continued for the following waste sites:
 - 200-W-33
 - 600-218
 - 600-281
 - Closure documentation is being prepared for the 600-37 and 600-262 waste sites.
- *200-CW-3*
 - 216-N-1: Closure documentation is being prepared for DOE and Regulatory approval.
 - 216-N-4: Field excavation is complete pending confirmatory surveys/samples.
- *BC Control Area*
 - For Zone A, approximately 39.5 acres have been excavated and surveyed.
 - For Zone B, an area of approximately five acres on the west side of BC Control Area is being remediated by removal of hot spots.



Photo 18

The 600-38 waste site is prepared for verification sampling to confirm that retrieve, treat, and disposal efforts were sufficient in removing contaminated soils from the waste site. The waste site is located in the 200-MG-1 operable unit.

RL-0041 Nuclear Facility D&D – River Corridor Closure Project

RL-0041.R1.1: 100K Area Remediation

Facility D&D

At the 183KW Sedimentation Basin Complex, demolition and debris load-out continued on the 183.3KW Filter Basin and 183.7KW Pipe Tunnel.

In the 100K East Area, bags containing asbestos materials continued to be removed from the 1706KE/KER substructures. Results received on samples from inside various piping systems and components located within radiologically controlled areas of the 115KE Gas Drier Building are being analyzed. The analytical results will be used in demolition planning.

Preparations were completed for demolishing the 116KE Reactor Exhaust Stack and removing two overhead bridge cranes and the counterweights for the C elevator in the 105KE Reactor Building using explosive demolition techniques. Work documents are approved. Floor protection consisting of cranes mats, rough-cut fire-resistant timber, and specialized foam were placed beneath the cranes. Access was provided through the 30-foot by 30-foot opening created in the south wall of the reactor building.

Locations for placing the explosive charges were identified on the structures and readied for placement of the charges.



Photo 19

The base of the 116KE Reactor Exhaust Stack is prepared for explosive demolition. Holes were cut into the base of the 175-foot structure to help direct the stack as it is lowered to the ground.



Photo 20

The 30-foot by 30-foot opening into the 105KE Reactor Building is complete. The existing doorway was expanded to accommodate the removal of the crane and elevator weight.

Preliminary design documents for disposition of the 105KE Reactor are being reviewed. Samples from the core borings are being analyzed. Additional reactor characterization is being performed through borescope evaluation, radiological survey, and collection of graphite samples in three access ports when possible. Asbestos abatement in the 105KE Reactor Building continued.

Interior duct fabrication and installation for the 105KW Fuel Storage Basin facility heating, ventilation, and cooling system (HVAC) upgrade continued. Scaffold erection for duct installation is ongoing as shop fabrication and preparatory work for duct runs. Installation of duct insulation continued. To date, 1,575 feet of duct and 120 feet of insulation have been installed.



Photo 21

Workers install the drop to a diffuser in the 105KW Transfer Bay as part of the heating, ventilation, and cooling system upgrade in the 105KW facility.

Infrastructure Utilities Upgrade Project

Rock and soil piles from construction of the import water line are being removed and consolidated for future transport to a previously used borrow pit. The design for the tie-in at the 42-inch export water line was revised and approved.

Fire water and potable water line installation continued in the vicinity of the 105KW Reactor and Cold Vacuum Drying Facility; about 2,650 feet of trench has been excavated and 1,780 feet of 8-inch fire water pipe, 430 feet of 12-inch fire water pipe, and 150 feet of 6-inch fire water pipe have been installed to date. Excavations are being backfilled with controlled density fill and gravel.

Construction continued on the fire water and potable water lines being installed for the remainder of the 100K Area; about 4,950 feet of 12-inch fire water pipe, 2,340 feet of 4-inch potable water pipe, and 630 feet of 6-inch fire water pipe have been installed.

Construction of the Water Treatment Facility continued. Installation of the wall and roof panels for the water treatment building was completed. Installation of the building wall insulation was started. Construction of the water storage tank continued and is about 80 percent complete.



Photo 22

Installation of the wall and roof panels for the water treatment building in the 100K Area is complete and construction of water storage tank continues.

Material procurement for the 13.8kV electrical line re-route and development of a second change design are ongoing. Component installation continued on five skid frames for the A9 Substation refurbishment. The switchgear building was installed and cable is being pulled through the previously placed conduits.

Waste Sites

Near the 100-K-63 site, construction of the container transfer area and haul roads continued. The following table showcases recent progress in removing contaminated soil from 100K Area waste sites:

Waste Site in Progress	Tons of Contaminated Soil Removed	
	Week Ending July 23, 2010	Total to Date
100-K-47 (Process Sewer)	-	17,393
100-K-53 (Glycol Heat Recovery Underground Pipelines)	-	350
100-K-56 (Reactor Cooling Water Pipelines)	-	11,509
100-K-63 (10-KW Floodplain)	2,549	3,123
100-K-68 (Pump Gallery and Catch Tank)	-	9,475
100-K-71 (Collection Box)	-	7,569
100-K-102 (French Drains and Mercury Stained Soil near 183KW Sedimentation Basin)	-	10,222
116-KE-3 (Storage Basin French Drain)	21	4,328
120-KW-1 (183-KW Filter Water Facility Dry Well)	2,221	15,184
Below-grade structure/soil removal		
183.1 KW (K West Headhouse)	-	21,240

Closure documentation (Remedial Action Report) is being developed, reviewed, and/or approved by DOE or the regulator for the following waste sites:

- 100-K-37 (Sulfuric Acid Tank)
- 100-K-38 (Caustic Soda Tank)
- 116-KE-6A (Condensate Collection Tank)
- 116-KE-6B (Evaporator Tank)
- 116-KE-6C (Waste Accumulation Tank)
- 116-KE-6D (Ion Exchange Column)
- 118-KE-2 (Control Rod Storage Cave)
- 130-KE-1 (Emergency Diesel Oil Storage Tank).



Photo 23

Work continues near the 100-K-63 waste site, the 100KW Floodplain, where CHPRC is constructing a new container transfer area and haul routes to support remediation efforts.

UPCOMING EVENTS

RL-0011 Nuclear Materials Stabilization & Disposition

RL-0011.R1: Plutonium Finishing Plant D&D

- Ship glove box 400 and three hoods from room 136 of the Analytical Laboratory to ERDF.
- Initiate removal of the process vacuum system piping from the 234-5Z and 291-Z buildings.
- Ship the last seven fuel vaults to ERDF for disposal as LLW.
- Transfer three additional access control buildings to the CHPRC D&D Project for demolition.
- Continue removal of the inner protected area fence line, razor wire, and perimeter alarm systems.
- Initiate removal of the original 1.5-mile-long Ecology block and cable vehicle barrier surrounding the former PFP Protected Area.
- Complete Surface Contaminated Object surveys of glove box HC-230C-3, apply contamination fixative within the box, and remove it from building ventilation.
- Enlarge two exit doorways and remove glove boxes HC-60 and HC-230C-3.
- Provide in-situ size reduction capability within the former Analytical Laboratory for five hoods.
- Continue external isolations and equipment removal from six glove boxes/hoods in room 139.
- Complete the disposition of chemical waste items from room 144.
- Continue isolation and cleanout of three glove boxes/hoods in rooms 180 and 188.
- Initiate chemical decontamination of six glove boxes in room 235B and glove box HA-46 in room 232.
- Enlarge two exit doorways; remove the final glove box from room 636 of the 2736-ZB building.
- Complete the removal of large, heavy equipment from six glove boxes in room 642 and removal of equipment from room 641 in the 2736-ZB building.
- Complete the application of contamination fixative in the 242-ZA control room, resolve ventilation issues in the control room, and initiate isolation and cleanout of glove box WT-2.

RL-0013 Solid Waste Stabilization & Disposition

RL-0013C:R1.1: MLLW Treatment

- Planned shipment of one box (3.2 m³) of MLLW non-debris sent from CWC to PFNW.

RL-0013C:R1.2: TRU Waste

- TRU Retrieval
 - 3A burial grounds:
 - Hold Hazard Review Board meeting and integrate any comments into Trench 8 retrieval and excavation procedures (SW-100-163, -201, and -202).
 - Continue Trench 8 site preparation work.
 - 4B/4C burial grounds:
 - Over-pack two previously retrieved waste containers and prepare them for shipment to CWC and PFNW.
 - Continue the Mobile Radioactive Decontamination Unit operating procedure and work package development start-up activities.
 - Complete backfilling and down-posting of the 4B Trench 7 CAs.
 - Review subsurface geophysical survey results for the 4B Trench 11 off-normal event site and shrink the boundary.
 - Conduct hazard analysis for the excavator interrogation of the 4B Trench 11 off-normal event site.
 - Perform mock-up excavator interrogation execution in the STS Trench.

- 12B burial grounds:
 - Complete set-up and alignment of the VJ Technologies' real-time radiography (RTR) assay system and drum warming unit (DWU).
 - Perform mock-up retrieval activities for contact-handled and remote-handled waste drums in the STS Trench.
 - Complete calibration, confirmation, and verification of the passive/active neutron assay unit.
 - Complete the acceptance test procedure (ATP) and OTP for the drum venting system DVS3 and the OTP for DVS2.
 - Complete the ATP on the RTR/DWU systems.
- Alpha Caisson Retrieval
 - Award mock-up on Remote Retrieval System contract if funding is viable.
- K-1/K-3 Filter Replacement
 - Issue PEP for review and approval.
 - Complete review and comment incorporation on SOW for options analysis and follow-up on CDR.
 - Issue request for proposal for engineering services.
 - Issue notice to proceed on alternative analysis and CDR.
- TRU Repack
 - Five planned TRUPACT-II shipments.

RL-0030 Soil & Groundwater Remediation, Groundwater/Vadose Zone

RL-0030.R1: Central Plateau Soil & Groundwater

- Continue construction of the 200 West and DX Groundwater Treatment Facilities.
- Continue decommissioning wells across the site.
- Continue drilling at 100-BC-5, 100-HR-3, 100-KR-4, 200-ZP-1, and 300-FF-5.
- Continue planning for well installations at the 100-HR-3 operable unit.

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

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

- Continue demolition of the U Plant ancillary facilities.
- Continue asbestos abatement in the U Canyon galleries.
- Continue demolition preparations for the 284-E Powerhouse.
- Continue demolition planning and characterization of the 200 West Area industrial facilities.
- Continue demolition of the 200 East Core Industrial Area facilities.
- Continue planning and preparations for demolition of the 209-E Criticality Mass Laboratory.

RL-0040.R1.2: Outer Zone D&D/Waste Sites

- Continue removal of debris sites throughout the ALE Reserve.
- Continue demolition of the upper ALE facilities, including the 6652-C building.
- Begin demolition of the 6652-U Rattlesnake Mountain Upper Pump House.
- Continue cold and dark isolation activities and characterization of the 6630, the Hodges Well Pump House and Tank, and the T520-6 Day Wireless Facility.
- Continue planning and cultural reviews for removing debris from the North Slope.
- Continue remediation efforts in the BC Control Area, 200-CW-3, and 200-MG-1 areas.

RL-0041 Nuclear Facility D&D – River Corridor Closure Project

RL-0041.R1.1: 100K Area Remediation

- Demolish the 116KE Reactor Exhaust Stack, bridge cranes, and elevator counterweights.
- Continue demolition of the 183KW Sedimentation Basin structures.
- Continue demolition preparation activities for the 115KE, 117KE, 1706KE/KER structures.
- Continue debris removal from the 105KW Fuel Storage Basin.
- Continue activities for upgrading the 105KW heating, ventilation, and cooling system.
- Continue preliminary design and characterization activities for disposition of the 105KE Reactor.
- Continue activities for isolating 100K Area utilities to support of cold and dark preparations.
- Continue remediating soil from waste sites.