



# Weekly Progress



AMERICAN RECOVERY & REINVESTMENT ACT

Week Ending April 29, 2011



CHPRC-01318

Contract DE-AC06-08RL14788  
Modification MO47

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## OVERVIEW

CH2M HILL Plateau Remediation Company (CHPRC) is using funds from the American Recovery and Reinvestment Act (Recovery Act) to accelerate critical environmental cleanup across the Central Plateau and the 100K Area along the Columbia River to help pursue the U.S. Department of Energy (DOE) “2015 Vision” to shrink the Hanford Site cleanup footprint.

### RL-0011 PLUTONIUM FINISHING PLANT D&D

CHPRC is accelerating critical decontamination and decommissioning work to cleanout and prepare the Plutonium Finishing Plant (PFP) for demolition by 2013, three years ahead of the Tri-Party Agreement milestone of September 2016.

### RL-0013 SOLID WASTE STABILIZATION & DISPOSITION

CHPRC is accelerating cleanup of Hanford’s legacy waste and fuels, including retrieving, repackaging, and shipping transuranic (TRU) waste and shipping mixed low-level waste (MLLW) and low-level waste (LLW) for treatment and/or disposal.

### RL-0030 SOIL & GROUNDWATER REMEDIATION

In the ongoing effort to protect the Columbia River, CHPRC is constructing two groundwater treatment facilities; installing 265 wells for monitoring, extracting, and remediating groundwater; and decommissioning 280 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 remediating 24 waste sites and decommissioning and demolishing (D&D) 34 facilities to reduce mortgage, surveillance, and maintenance costs on buildings that are no longer of service. The scope also includes cleanup along the outermost edges of the Hanford Site at the Arid Lands Ecology (ALE) Reserve and North Slope, preparing the U Plant for a first-of-its-kind canyon demolition, and preparing to disposition radioactive railcars in the 200 North Area.

### RL-0041 100K AREA REMEDIATION

CHPRC is demolishing 15 reactor support facilities and sampling and/or remediating 23 waste sites to shrink the cleanup footprint of two reactors, K East and K West, located in the 100K Area along the Columbia River.

## For More Information

To find out more about Recovery Act progress at the Hanford Site, visit [www.hanford.gov/recovery](http://www.hanford.gov/recovery).

For information about CHPRC, including weekly Recovery Act newsletters and videos, visit [www.plateauremediation.hanford.gov](http://www.plateauremediation.hanford.gov) or contact [chprcc@rl.gov](mailto:chprcc@rl.gov).

## SUMMARY

The following chart outlines CHPRC’s progress on its main Recovery Act work goals. Progress on subprojects and other Recovery Act-funded activities are detailed throughout this report and accompanied by a short progress video available on [www.youtube.com/hanfordplateau](http://www.youtube.com/hanfordplateau).

### PLUTONIUM FINISHING PLANT D&D



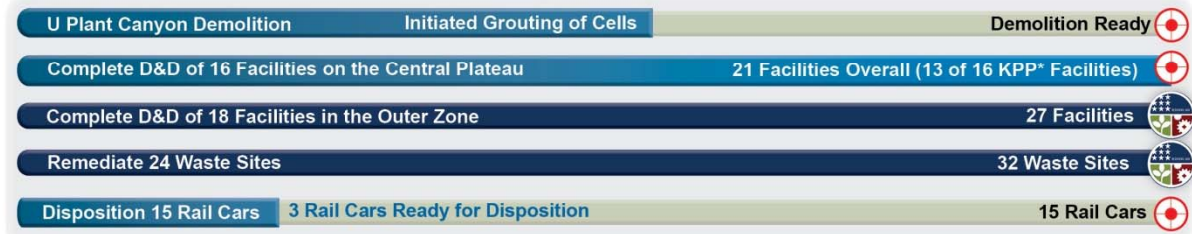
### SOLID WASTE STABILIZATION & DISPOSITION



### SOIL & GROUNDWATER REMEDIATION



### NUCLEAR FACILITY D&D



### 100K AREA REMEDIATION



\*Key Performance Parameters (KPP) are specific items (wells, buildings, etc.) included in the Target. "Overall" indicates the total number completed with Recovery Act funds. "Completed" marks that CH2M HILL has completed a KPP.

## ACCOMPLISHMENTS

### RL-0011 Nuclear Materials Stabilization & Disposition

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

ACTIVITY	PFP WASTE REMOVAL & DISPOSITION	
	<i>Week of April 29, 2011</i>	<i>Completed to Date with Recovery Act Funding</i>
Gloveboxes/hoods removed or dispositioned in place	2 gloveboxes	115 gloveboxes/hoods
Add'l gloveboxes ready for removal/size reduction		6 gloveboxes/hoods
MLLW/LLW shipped	7 m <sup>3</sup>	2,491 m <sup>3</sup>
TRU shipped	20 m <sup>3</sup>	547 m <sup>3</sup>
Non-radioactive waste shipped	-	23 m <sup>3</sup>
Process transfer line removed	-	491 feet
Process vacuum system piping removed	-	1,210 feet
Asbestos removed	118 ft	13,994 feet

The PFP team completed 120 days without an Occupational Safety and Health Act (OSHA) recordable injury or a reportable event involving hazardous energy, radiological control, or conduct of operations. The project has also now surpassed 1 million work hours without a lost or restricted workday case. The PFP workforce is mixed with both veteran PFP workers and Recovery Act hires working together to accelerate cleanout and demolition preparations across the PFP complex. A celebration event for all project employees is planned.

#### *Process and Laboratory Areas*

Glovebox D&D is complete in the 2736-ZB vault support facility and in the 234-5Z building backside vault rooms, the Standards Laboratory, Analytical Laboratories, and the Radioactive Acid Digestion Test Unit (RADTU) process area. Work is ongoing in the Plutonium Process Support Laboratory (PPSL) and the Remote Mechanical A and C (RMA/RMC) Line process areas.

In the PPSL area, the D&D crew removed glovebox 179-6 from building ventilation. The first two of eight isolated gloveboxes in room 179 were transferred to waste operations and loaded into an IP-2 container for shipment. Several doors must be enlarged to permit the six other gloveboxes and a glovebox in nearby room 188 to be removed. Work packages to complete these modifications are complete, and resources will be identified for the work as soon as practicable.

With all of the gloveboxes in the RADTU area removed or dispositioned in place, the crew began preparations, including removal of the large radiological containment enclosure where glovebox work was performed, to turn over the area to waste operations for alternative uses,

Recovery actions were completed for the contamination event in the 234-5Z duct level and the process areas were released for resuming intrusive work.

Preparations began for final removal of conveyor glovebox HC-4 from the RMA/RMC Lines, which will then permit removal of conveyor HC-3. The HC-4 conveyor and one section of HC-3 will be loaded directly into standard waste boxes (SWBs) and shipped to the Waste Receiving and Processing (WRAP) facility for disposal as TRU waste; the remaining two sections of HC-3 will be shipped to Perma-Fix Northwest (PFNW) for size reduction prior to shipment to WRAP. Also at the RMA/RMC Lines, the criticality drain tank under glovebox HA-46 was air gapped from the glovebox, completing the last major action required to disposition this glovebox in place.



Photo 1

*Gloveboxes 179-2 and -3, recently removed from the Plutonium Finishing Plant, are loaded for shipment and disposal.*

### *2736-Z/ZB Vault Complex*

The vault complex D&D team continued coupon sampling of remaining ventilation ductwork to determine if it can be stabilized and left in place for demolition or if it will need to be removed. So far, only one section of the ductwork has been identified with levels warranting removal prior to demolition; preparations were completed to begin removing that section beginning next week.

In parallel, work is well under way to prepare the nearby 2721-Z emergency diesel generator building for demolition. An underground diesel storage tank was excavated and removed, and the fuel lines from the tank to 2721-Z were excavated for removal next week. No indication of prior leakage was apparent on inspection of the tank or the excavation site; however, soil samples will be taken and analyzed to confirm the soil is clean prior to backfilling the hole.

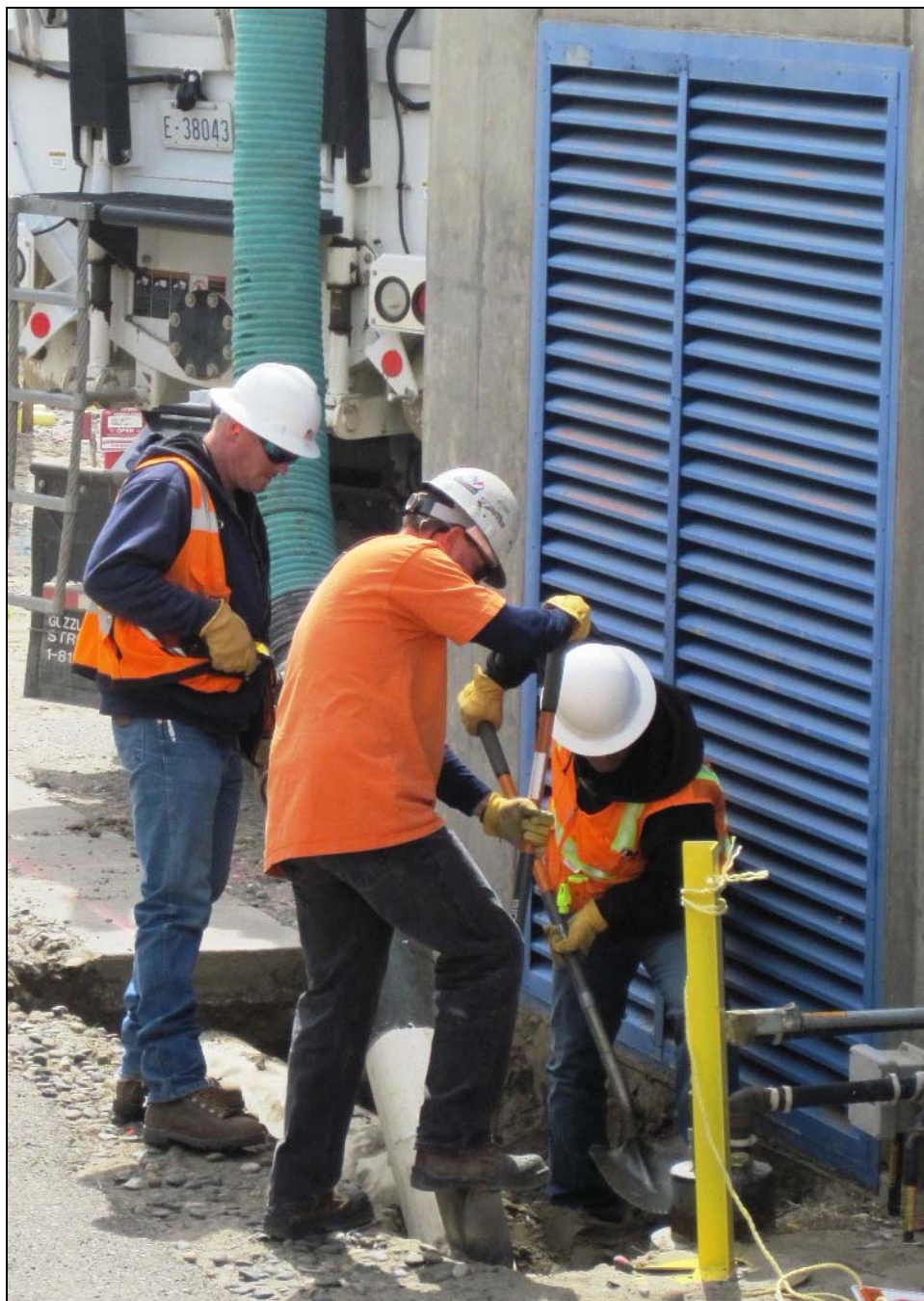


Photo 2

Workers at the Plutonium Finishing Plant excavate underground fuel transfer lines from an underground storage tank to a power generator.

#### *242-Z Americium Recovery Facility*

The 242-Z D&D team completed size reduction of the WT-4 and WT-5 gloveboxes. Following removal of the waste and isolation of temporary power to the facility, the team will be reassigned to support in-situ size reduction of large glovebox HA-23S in the RMA Line of the 234-5Z building.

#### *Infrastructure, support systems, and equipment removal*

Three gloveboxes were shipped to PFNW for size reduction, including glovebox 152-522 from the Analytical Laboratories and HA-19B1 and B2 from the RMA Line. Two additional gloveboxes, 179-2 and -3 from the PPSL were loaded for shipment next week. Two additional structures, the 2711-B1 and 2711-B2 breathing air compressor trailers on the east side of the plant, were isolated to a fully cold and

dark condition. Air intake ducts will be removed from the roofs of the trailers and the trailers will be removed from the PFP property protected area and released to the Mission Support Contractor for future reuse or excess.

## RL-0013 Solid Waste Stabilization & Disposition

### RL-0013C:R1.1: Mixed Low-Level Waste/Low-Level Waste Treatment

ACTIVITY	SOLID WASTE STABILIZATION & DISPOSITION <i>Total Completed with Recovery Act funds</i>
Ship 1,800 m <sup>3</sup> of MLLW/LLW for treatment and disposal	<ul style="list-style-type: none"> <li>• 1,394 m<sup>3</sup> shipped               <ul style="list-style-type: none"> <li>○ 1,138 m<sup>3</sup> treated and disposed</li> <li>○ 256 m<sup>3</sup> at offsite treatment facilities awaiting processing. Treatment is scheduled for FY11</li> </ul> </li> </ul>

One shipment was sent from the Waste Retrieval Project (WRP) to PFNW to undergo treatment through macro-encapsulation. The shipment included 36 drums (7.5 m<sup>3</sup>) of MLLW debris in six 8 x 4 x 4 metal boxes. Processed waste from this shipment will be returned to the Hanford Site for disposal in the Mixed Waste Disposal Units at the low-level burial grounds.

### RL-0013C:R1.2: Transuranic Waste

ACTIVITY	SOLID WASTE STABILIZATION & DISPOSITION <i>Total Completed with Recovery Act funding</i>
Retrieve 2,500 m <sup>3</sup> of suspect TRU waste	<ul style="list-style-type: none"> <li>• 532 m<sup>3</sup> are staged, pending shipment</li> <li>• 1,004 m<sup>3</sup> shipped to a treatment, storage, or disposal facility</li> </ul>
Retrieve 50 m <sup>3</sup> of suspect remote-handled TRU waste	<ul style="list-style-type: none"> <li>• 8 m<sup>3</sup> are staged, pending shipment.</li> <li>• 72 m<sup>3</sup> shipped to a treatment, storage, or disposal facility</li> </ul>

At Trench 17 of the 3A burial ground, excavation on Boxes 26 and 27 continued as did the development of work packages to support upcoming shipments.

In Trench 11 of the 4B burial ground, unanticipated train rail debris (10 rails, 27 feet long) was located along with other unanticipated debris and removal was initiated. An additional ground-penetrating radar scan was performed to locate additional containers and unanticipated debris. The 4C Mobile Drum Venting System (MDVS) functional test/user validation procedure was initiated and the 4C assay campaign for five metal containers from Trench 11 in the 4B burial ground was completed.

At the 12B burial ground, the first 8 x 4 x 4 waste boxes (each containing six drums) and three overpack boxes were shipped to PFNW. Fifty-six drums were assayed in the Gamma Assay System, six drums were assayed in the Passive/Active Neutron (PAN) Assay System, and 12 drums were vented in Drum Venting System 3. Concrete-shielded overpacks were prepared for the removal of remote-handled (RH) containers, and 69 drums (14.3 m<sup>3</sup>) were removed from Trench 17. The contamination area excavation continued in Trench 17 under the weather enclosure.

### TRU Repackaging & Shipments

ACTIVITY	SOLID WASTE STABILIZATION & DISPOSITION <i>Total Completed with Recovery Act funding</i>
Repackage 850 m <sup>3</sup> of WIPP certifiable TRU waste	<ul style="list-style-type: none"> <li>• 841 m<sup>3</sup> have been repackaged</li> </ul>
Disposition 2,000 m <sup>3</sup> of contacted-handled TRU waste	<ul style="list-style-type: none"> <li>• 1,415 m<sup>3</sup> have been disposed</li> </ul>

Twelve drums were repackaged at T Plant and one at WRAP for a total of 13 drums repackaged this week. In conjunction with the Central Characterization Program, three TRUPACT-II shipments left the



Hanford Site bound for the Waste Isolation Pilot Plant (WIPP), for a total of 175 shipments completed since shipments resumed, thanks to Recovery Act funding, in March 2010.

Two shipments, containing two boxes of TRU debris, (5.9 m<sup>3</sup>) were shipped from the WRP to PFNW this week. The waste will be repackaged into SWBs and returned to the Hanford Site for WIPP certification activities.



*Workers load a small box of transuranic (TRU) waste from the Waste Retrieval Project into a shipping container for transport to Perma-Fix Northwest for processing. The TRU waste will be repackaged into standard waste boxes and returned to the Hanford Site for Waste Isolation Pilot Plant certification.*

Photo 3



Photo 4

Workers secure a box of transuranic waste inside a shipping container in order to meet the Department of Transportation requirements prior to shipment.

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

RL-0030.R1: Central Plateau Soil & Groundwater

ACTIVITY	WELL DRILLING & DECOMMISSIONING	
	Week of April 29, 2011	Complete to Date with Recovery Act funds
Install 265 wells and/or boreholes along the river and in the Central Plateau	3 wells completed	303
Decommission 280 old wells and boreholes that are no longer of service	5 wells completed	226

### 200 West Groundwater Treatment Facility

Construction of the process and transfer facilities also included (listed by facility):

- *Process buildings*
  - Radiological Building: Instrumentation and controls rough-in was initiated. Ongoing activities include process piping rough-in overhead as well as in the trenches, lighting and power conduits overhead, and installation of exterior transformers.
  - Bio-Process Building: Installation of electrical panels, switchgear, fire alarm, and exterior transformers continued. Installation of the C- and A-line utility racks process piping is approximately 80 percent complete. Work continued on grading and installation of the septic tank and roof drains. Installation of roll-up doors is nearing completion. Outside,

canopy slab-on-grade and trench concrete work continued. Formwork and epoxy coating mock-up were initiated for containment walls.

- Bio Pad: Concrete formwork was completed for the splitter box. Installation of vapor off gas ductwork and blower equipment continued as did installation of racks and panels, conduit, sleeves, cabling for lightning protection, and disconnects for an overhead crane.
- *Transfer buildings*
  - Extraction Building #1: Permanent power was installed. Water was installed in the tank for testing.
  - Extraction Building #2: Installation of instrumentation and controls rough-in (control stands and instruments), piping, pump, conduit, and lighting continued.
  - Injection Building #1 & #2: Installation of service gears, piping, and/or pump continued.
- *Lime Building*
  - Activities continued for footings and underground conduit installation.
- *Construction Acceptance Tests*
  - Construction acceptance tests continued for extraction wells and Extraction Building #1.



Photo 5

Piping supports are being installed for the Biological Process Building for the 200 West Groundwater Treatment Facility.



Photo 6

Concrete placement continues for the Lime Stabilization Building for the 200 West Groundwater Treatment Facility. Recovery Act funds are concurrently supporting construction of the facility's two main process buildings, four transfer buildings, and lime stabilization building that will work together to treat contaminated groundwater at Hanford's Central Plateau.

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

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

### CENTRAL PLATEAU FACILITIES DEMOLISHED WITH RECOVERY ACT FUNDS

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• 211U Cold Chemical Makeup Tank Farm</li> <li>• 211UA Cold Chemical Makeup Tank Farm Addition</li> <li>• 203UX Gas Storage Facility</li> <li>• 2701M Office Bldg</li> <li>• 272E Fabrication, Mockup Shop Bldg</li> <li>• 2716E Power Maintenance Storage Bldg*</li> <li>• 2722W Welding Laboratory Bldg*</li> <li>• 224UA UO3 Calcination/Load-out Facility</li> <li>• 2710W Coal Handlers Shed</li> <li>• 2701EC 209-E Guard Station</li> <li>• 2902E Water Storage Tank</li> </ul> | <ul style="list-style-type: none"> <li>• 2734EA Gas Cylinder Storage Bldg</li> <li>• 275E Carpenter Shop Bldg</li> <li>• MO104 Mobile Office</li> <li>• MO405 Mobile Office</li> <li>• MO840 Mobile Office</li> <li>• X8 Motor Car Shed*</li> <li>• 224U UO3 Plant Concentration/Load-out Bldg</li> <li>• 284WB Package Boiler Plant</li> <li>• 209EA 90 Day Storage Pad</li> <li>• 2902W Water Storage Tank</li> </ul> |
|---|---|
- TOTAL: 108,951 square feet**

\*Not part of the Key Performance Parameter

### PLANNED FOR D&D/IN PROGRESS

- 284E Power House & Steam Plant
- 209E Critical Mass Laboratory
- 284W Power House & Steam Plant

### *U Canyon*

CHPRC crews have now filled the 221-U North Electrical Gallery with grout, delivering more than 300 yards of grout in five separate “lifts” and filling all void spaces inside. On the canyon deck, core drilling of six-foot grout conveyance holes into cell covers is approaching completion.

### *U Plant Ancillary Facilities*

Closure documentation is being prepared.

### *200 East Core Industrial Area*

At the demolition site of the 284-E Power House, the focus remains on debris cleanup and site preparation for the upcoming removal of the structure’s boilers. Size-reduction and loadout of debris continued at the rate of 50-60 Environmental Restoration and Disposal Facility (ERDF) cans per day.



Photo 7

Removal of demolition debris continues at the site of industrial structures associated with the 284-E Power House. CHPRC demolished the building’s exhaust stacks and baghouses with explosives on March 4, 2011 and began demolition of the Power House soon after. Only the building’s boilers (shown left) remain to be demolished.

### *200 West Area Industrial Facilities*

Debris cleanup at the site of the explosive demolitions of the 284-W Power House stacks and baghouses is complete. Demolition and debris cleanup began on the crusher house and lower conveyor structures after asbestos abatement was recently completed. Inside the Power House building, abatement continues on the first and second floors.



Photo 8

*CHPRC is demolishing the lower conveyor structure associated with the 284-W Power House.*



Photo 9

*Heavy equipment removes debris from the demolition of the lower conveyor structure associated with the 284-W Power House.*

#### *209-E Criticality Mass Laboratory*

CHPRC continued size-reduction and loadout of the HO-200 glovebox in the Mix Room of the 209-E Criticality Mass Laboratory and continued preparations to begin the cutting and removal of slab tanks in both the Criticality Assembly Room and Mix Room - the last major step before the facility can be downgraded to a Less Than Hazard Category 3 and ultimately demolished.

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

## OUTER ZONE FACILITIES DEMOLISHED WITH RECOVERY ACT FUNDS

212N Storage Building	6652M Fallout Laboratory
212P Electrical Storage & Transformer Shop	6652R Acid Storage Shed
212R Storage Building	6652C Space Science Laboratory
614 Monitor Station	6652CSHED Storage Building
646 Radioecology Field Laboratory	6652D Pump House
6652G ALE Field Storage Building	6652T Fire Protection Lower Pump House
6652H ALE Laboratory 1	6652U Rattlesnake Mountain Upper Pump House
6652I ALE Headquarters	623A Plant Radio Relay Bldg
6652J ALE Laboratory II	T520-6 Navy MARS Radio Station
6652S Sentry Shed*	6631 Radio Telescope Pedestal*
6634 ENW Tower and Building*	6630 Hodges Well Pumphouse*
6635 Crown Castle/Cingular Tower and Building *	6636 Columbia Communication Tower and Building*
6637 Tri City Amateur Radio Tower and Building*	6633 Franklin County Communication Building*
6632 Verizon Telephone Enclosure*	

\*Not part of the Key Performance Parameter

*North Slope Debris Removal*

Personnel with CHPRC subcontractor Sealaska Environmental Services have completed cleanup of Areas 12, 13, 15, 16, and 18. Work continues in Area 10 while crews await release of culturally and biologically sensitive sites in Areas 10, 11, 14, and 17.

*Arid Lands Ecology Reserve*

Revegetation of cleared sites on ALE is ongoing while closure documentation for removal of facilities from the area is prepared.

*D&D of Railcars Located on the 212-R Rail Spur*

CHPRC crews dispositioned their first railcar, delivering the flatcar to ERDF. Preparations continue for delivering the two locomotives to the historic B Reactor museum the week of May 9 for preservation and display. Crews also completed the addition of wet grout to the 12 remaining cars, preparing them to be sealed and wrapped for delivery.





Photo 10

*CHPRC finished applying wet grout to contaminated railcars in the 200 North Area. The railcars are now ready to be sealed and wrapped for delivery to the Environmental Restoration Disposal Facility for disposal.*



Photo 11

A flatcar leaves the 200 North Area bound for the Environmental Restoration and Disposal Facility. This is the first railcar to leave for disposition.

*Waste Sites*

The following table showcases CHPRC’s recent progress in outer zone waste remediation.

WASTE SITE IN PROGRESS	TONS OF CONTAMINATED SOIL REMOVED	
	<i>Week Ending April 29, 2011</i>	<i>Total to Date with Recovery Act funds</i>
BC Control Area	10,000	400,000

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

- 600-40: Additional sample testing was performed on April 20, 2011.
- 600-218: Remediation activities are complete, contingent on sampling.
- 600-220: Initial excavation is complete, contingent upon sampling.
- 600-228: A culture report is being reviewed and is anticipated to be approved in June. Evaluation indicated this area may have sampling and excavations performed without affecting culturally sensitive areas. Field activities involving posting are ongoing.
- 600-281: A cultural report was reviewed and further evaluation indicated this site may be remediated without affecting culturally sensitive areas.
- 600-282: Initial remediation is complete pending sampling results. Backfill material is staged.

- 216-S-19: Direct push test sampling is complete. Some sample results are questionable and are being verified by the laboratory while other results are under review.
- 216-S-26: Shipments to ERDF continued.
- 200-W-147-PL: Post-verification sampling is complete; laboratory analysis of results is in process.
- *BC Control Area*
  - Radiological down-post surveys and localized spot removal are ongoing.

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

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

#### 100K AREA FACILITIES DEMOLISHED WITH RECOVERY ACT FUNDS

- 183KW Chlorine Vault
- 183.1KW Headhouse
- 183.3KW Filter Basin
- 183.7 KW Pipe Tunnel
- 110KE Gas Storage Facility
- 117KE Exhaust Air Filter Bldg
- 116KE Reactor Exhaust Stack
- 118KE Horizontal Control Rod Storage
- MO048 Construction Lunch Trailer
- MO969 Ops/HPT Change Trailer
- 115KE Gas Recirculation
- 185-K Potable Water Treatment Plant\*

\*Not part of the Key Performance Parameter

#### PLANNED FOR D&D/IN PROGRESS

- 183.4KW Clearwell
- 190KW Main Pump House
- 183.4KE Clearwell
- 190KE Main Pump House
- 1605KE Guard House
- 181KE River Pump House

#### *Facility D&D*

Demolition on the west side of the 105-KE Reactor building is complete. Demolition of the 183.4-KE and 183.4-KW Clearwells continued concurrently, while crews cleared dirt away from the 183-KE Sedimentation Basins to begin a planned phased demolition of the structure. Below-ground demolition and cleanup at the site of the 183.1-KE Headhouse also continued. With asbestos abatement complete and the containment structure removed from the 181-KE River Pumphouse Structure, CHPRC crews are preparing the structure's six 39,000-pound pumps for removal.



Photo 12

*Demolition of the 183.4-KE Clearwell continues. CHPRC is concurrently demolishing both the K East and K West clearwells. The clearwells are 120,000-square-foot underground water storage structures that were part of a water treatment system that once supported operations of the K Reactors.*



Photo 13

*An excavator removes dirt to gain access to begin demolition of the 183-KE Sedimentation Basins.*



Photo 14

With the above-grade portion demolished, CHPRC is now demolishing the below-ground portion of the 183.1-KE Headhouse. The Headhouse is part of the 183-KE Sedimentation Basin complex that CHPRC is demolishing with Recovery Act funds. The complex was part of a water treatment facility that supported operations of the K East Reactor and mirrored the 183-KW Sedimentation Basin complex that CHPRC demolished with Recovery Act funds in 2010.

#### *Infrastructure Utilities Upgrade Project*

The new 100-K potable water and fire-protection systems are fully operational and online. The new heating, ventilation, and cooling system continues to enable “off-mask” work inside the 105-KW Spent Fuel Storage Basins. The new A-9 substation is energized and awaiting switchover by site utilities.

#### *Waste Sites*

CHPRC continued excavating the 100-K-53 waste site, the 100-KE Glycol Heat Recovery Underground Pipelines, with 2,579 tons of contaminated soil removed last week for a total of more than 17,300 tons removed to date.

## UPCOMING EVENTS

### RL-0011 Nuclear Materials Stabilization & Disposition

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

- Complete modifications to enlarge three doorways and remove six isolated gloveboxes from room 179 and one from room 188 of PPSL.

- Complete D&D and remove glovebox 179-1, the last remaining glovebox in the laboratory and backside vault areas.
- Transfer previously isolated glovebox HA-21I and conveyor gloveboxes HC-3 and HC-4 from the RMA/C Lines to waste operations.
- Complete cleanout of the 232A scrubber cell and disposition glovebox HA-46 in place.
- Remove 2711-B1 and -B2, two breathing air compressor trailers, and the former TK-701-12B underground diesel fuel tank from PFP.
- Complete cold and dark isolations and prepare the 2736-Z vault complex for demolition.
- D&D the remaining gloveboxes in the RMA/RMC Line process areas.
- Continue removing process vacuum, process transfer piping, and asbestos insulation from throughout 234-5Z building.

## RL-0013 Solid Waste Stabilization & Disposition

### RL-0013C:R1.1: MLLW Treatment

- One MLLW shipment (43.5 m<sup>3</sup>) planned from the Central Waste Complex to PFNW for treatment by macro-encapsulation.
- One MLLW shipment (3.6 m<sup>3</sup>) planned from the WRP to PFNW for treatment by macro-encapsulation.

### RL-0013C:R1.2: TRU Waste

- TRU Retrieval
  - 3A burial ground
    - Remove 3A Trench 17 Boxes 26, 27, and 80.
    - Complete repairs on Box 23 from Trench 17.
    - Complete work package and begin repairs to Box 14 in Trench 17.
    - Ship first four containers under retrieval packages special packaging authorization transportation authorization to PFNW.
  - 4B/4C burial ground
    - Remove three RH concrete boxes and two RH metal containers (9 m<sup>3</sup>) from Trench 11 in the 4B burial ground.
    - Remove four contact-handled containers (6.3 m<sup>3</sup>) from Trench 11 in the 4B burial ground.
    - Assay two thorium drums and other removed containers.
    - Complete MDVS functional test/user validation procedure.
    - Relocate a crane from the 3A burial ground to the 4B burial ground to remove Box 105 (46 m<sup>3</sup>) in Trench 11.
    - Award fabrication of overpack container for Box 101 in Trench 11.
    - Ship 11 waste containers (101.1 m<sup>3</sup>) from Trench 11 of the 4B burial ground.
  - 12B burial ground
    - Continue waste removal from Trenches 17 and 27.
    - Continue processing removed drums (e.g., assay, vent, x-ray waste drums).
    - Set-up and overpack additional 8 x 4 x 4 foot waste boxes, each holding six 55-gallon removed waste drums.
    - Continue excavation to expose more waste containers.
- TRU Repackaging and Shipments
  - Four planned shipments.
- Suspect TRU Waste Shipments
  - Two TRU-mixed waste shipments (17.6 m<sup>3</sup>) planned from WRP to PFNW for repackaging.

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

### RL-0030.R1: Central Plateau Soil & Groundwater

- Continue construction of the 200 West Groundwater Treatment Facility.
- Continue well drilling and decommissioning.

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

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

- Continue debris cleanup at the sites of the 200 East Area demolitions.
- Complete debris cleanup at site of the demolished 284-W Power House crusher house and conveyor.
- Complete core-drilling of grout conveyance holes into cell covers inside U Canyon.
- Continue debris cleanup at the sites of the 200 East Areas demolitions.

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

- Continue debris removal on the North Slope.
- Continue revegetating cleared sites on the ALE Reserve.
- Continue railcar disposition activities.
- Perform field activities at the 600-228 and 600-281 waste sites.
- Backfill the 200-W-147-PL waste site.

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

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

- Continue demolition of 183.4-KW and 183.4-KE Clearwells and 183.1-KE Headhouse.
- Begin demolition of 183-KE Sedimentation Basins.
- Remove six pumps from 181-KE River Pumphouse Structure.
- Continue excavating soil from and planning for remediation of 100K Area waste sites.