



# Weekly Progress



AMERICAN RECOVERY & REINVESTMENT ACT

Week Ending April 15, 2011



CHPRC-01316

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).

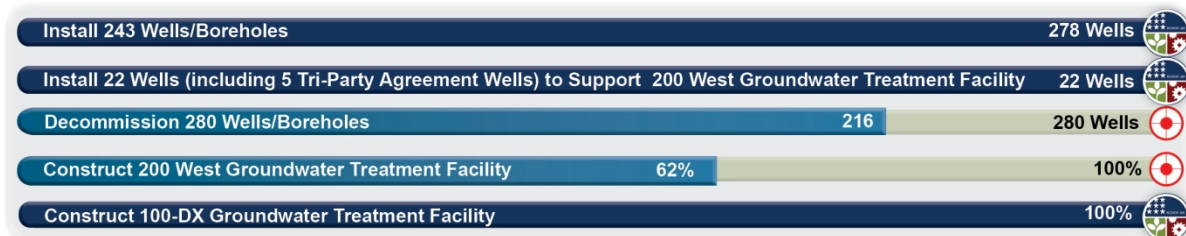
### PLUTONIUM FINISHING PLANT D&D



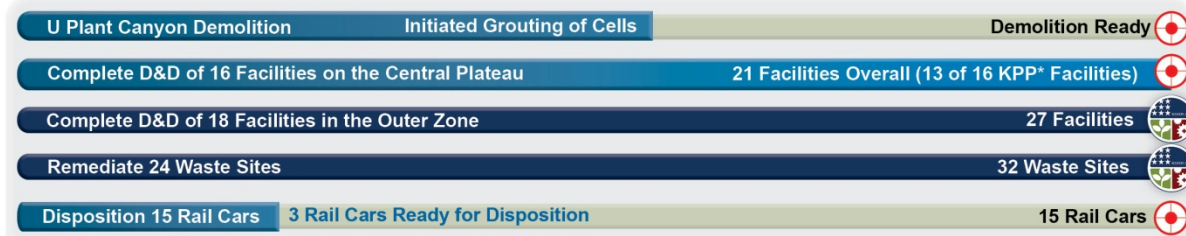
### SOLID WASTE STABILIZATION & DISPOSITION



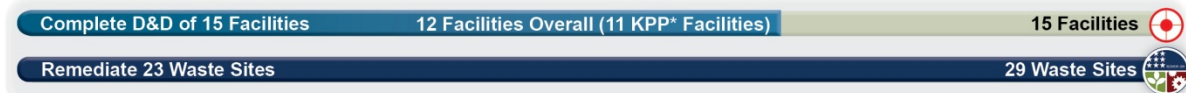
### SOIL & GROUNDWATER REMEDIATION



### 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 15, 2011</i>   | <i>Completed to Date with Recovery Act Funding</i> |
| Gloveboxes/hoods removed or dispositioned in place | -                               | 113 gloveboxes/hoods                               |
| Add'l gloveboxes ready for removal/size reduction  | -                               | 6 gloveboxes/hoods                                 |
| MLLW/LLW shipped                                   | 13 m <sup>3</sup>               | 2,470 m <sup>3</sup>                               |
| TRU shipped  | 11 m <sup>3</sup>               | 527 m <sup>3</sup>                                 |
| Non-radioactive waste shipped                      | -                               | 23 m <sup>3</sup>                                  |
| Process transfer line removed                      | 5                               | 491 feet   |
| Process vacuum system piping removed               | -                               | 1,210 feet   |
| Asbestos removed                                   | 40                              | 13,804 feet  |

#### *Process and Laboratory Areas*

Glovebox D&D is complete in the Standards Laboratory and the Analytical Laboratories, and one of the laboratory D&D crews is now clearing miscellaneous materials from the areas prior to the Balance of 234-5Z D&D crews, responsible for preparing the entire building for demolition, taking over.

In the Plutonium Process Support Laboratory (PPSL), work continued to externally isolate three additional gloveboxes in rooms 179 and 188 from various utilities to prepare them for removal from building ventilation. These boxes are targeted for completion over the next two weeks, leaving only one glovebox in PPSL.

In the Remote Mechanical A and C (RMA and RMC) Lines, most of the remaining connections between glovebox HA-46 and the 232A hydrogen fluoride scrubber cell have been isolated, and the interior of the glovebox was painted to prepare it for removal from building ventilation. This glovebox is planned for in-place disposition by the end of April for removal as LLW during building demolition.

In the Radioactive Acid Digestion Test Unit (RADTU) area, the crew continued work on punch list items, having previously dispositioned the last three gloveboxes in this area in place.



*Glovebox 188-1 in the Plutonium Process Support Laboratory is being isolated from the facility in preparation for removal.*

Photo 1



Photo 2

Workers prepare for an entry to the room 232 hydrogen fluoride scrubber cell at the Plutonium Finishing Plant where they are isolating the connections between the cell and glovebox HA-46.

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

The vault complex D&D team completed removal of the last section of the primary glovebox exhaust ductwork, which will be size reduced and disposed of as TRU waste. The criticality alarm system zones supporting the vault complex were deactivated. Work is continuing toward deactivation of the adjacent 2721-Z building, including installation of a backup generator for the 291-Z exhaust facility and removal of an underground diesel storage tank.

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

The 242-Z D&D team began removing and packaging the TRU waste generated from in-situ size reduction of the WT-4 and WT-5 gloveboxes. Only the floors of the boxes remain to be cut up. Once this

work is complete, the team will put the facility in a safe condition and relocate to the RMC Line to begin in-situ size reduction of HA-23S, one of PFP's largest gloveboxes.

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

A contamination event during transfer line removal work in the 234-5Z duct level impacted intrusive D&D work due to shared air space between the duct level and the process and laboratory areas. By the end of the week, the section of line being worked at the time of the contamination event was removed and packaged, and the area was being decontaminated.

This week's waste shipments included 13 cubic meters of LLW shipped to the Environmental Restoration Disposal Facility (ERDF), and 27 drums and three standard waste boxes (SWBs) of TRU waste shipped to the Waste Receiving and Packaging (WRAP) facility.

## RL-0013 Solid Waste Stabilization & Disposition

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

| ACTIVITY   | SOLID WASTE STABILIZATION & DISPOSITION   |
|--|---|
| Ship 1,800 m <sup>3</sup> of MLLW/LLW for treatment and disposal | <i>Total Completed with Recovery Act funds</i>  |
|  | <ul style="list-style-type: none"> <li>• 1,322 m<sup>3</sup> shipped               <ul style="list-style-type: none"> <li>○ 1,135 m<sup>3</sup> treated and disposed</li> <li>○ 187 m<sup>3</sup> at offsite treatment facilities awaiting processing. Treatment is scheduled for FY11</li> </ul> </li> </ul> |

One shipment (8.7 m<sup>3</sup>) was sent from the Waste Retrieval Project (WRP) to Perma-Fix Northwest (PFNW). The shipment included MLLW that will undergo macro-encapsulation. This shipment completed three pilot shipments made from the Hanford Site using a rolling road closure to PFWN. The Department of Energy Richland Operations Office (DOE-RL), City of Richland, and Hanford contractors worked collaboratively to develop a road closure plan. The successful shipment of these three waste packages provides the framework and experience to ship additional waste packages to PFWN and facilitates the timely disposition of the waste that would otherwise be stored in lieu of treatment and disposal.

The final reactive waste shipment (4.8 m<sup>3</sup>) was made from the Central Waste Complex (CWC) to IMPACT Services on April 13 for recycling. This is another important shipment removing the last of this legacy MLLW stream from CWC inventory. Historically, the reactive waste (i.e., sodium metal) has had little treatment capacity in the DOE Complex and at commercial treatment facilities. Hanford's contract with IMPACT Services for the recycling of the sodium metal resulted in a cost effective and innovative disposition option. Once the sodium metal is recovered and recycled, the remaining LLW residues will be returned to the Hanford Site for disposal in the Mixed Waste Disposal Units in the low-level burial grounds.



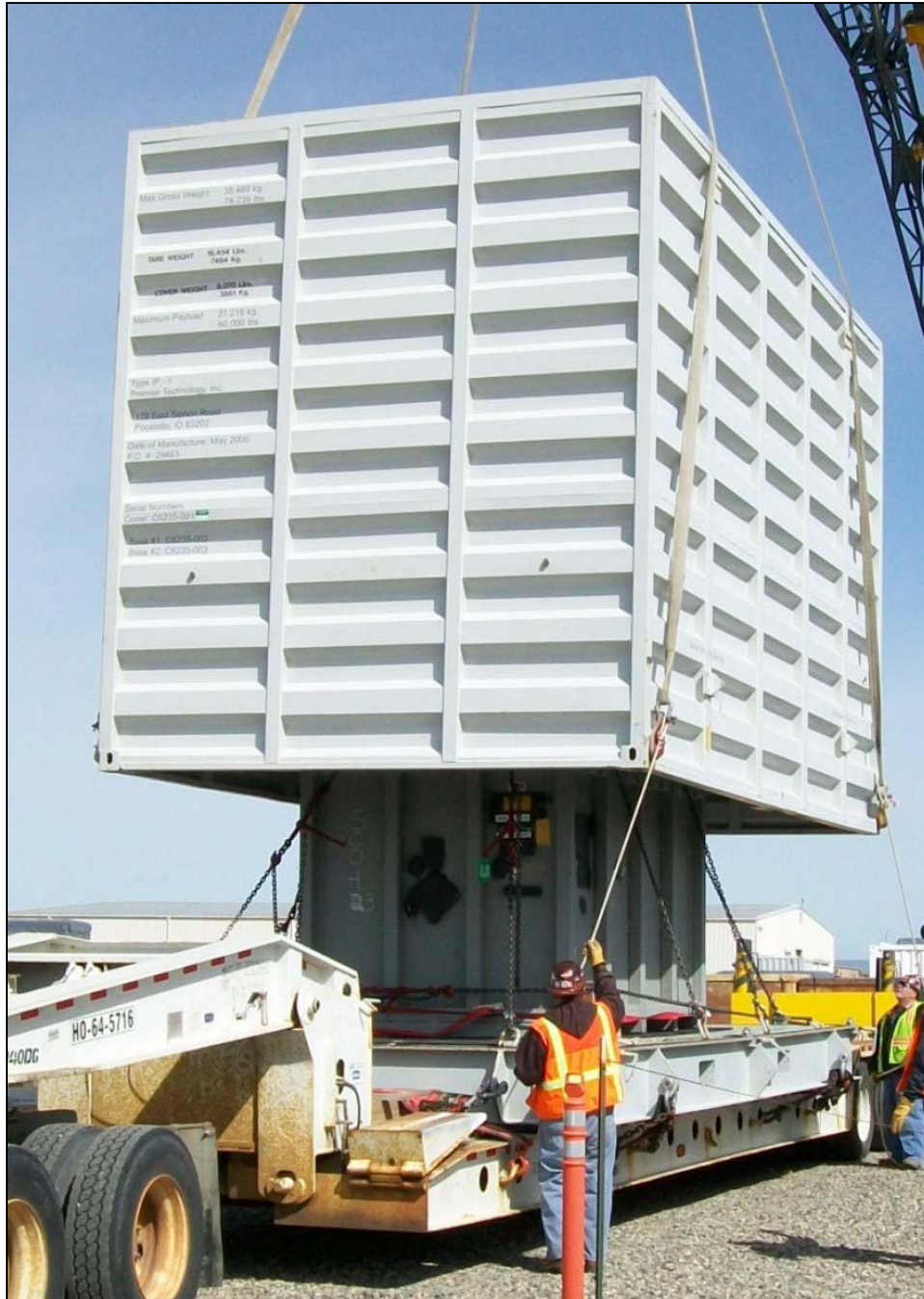


Photo 3

*Hanford workers load a mixed low-level waste box into a transportation overpack for shipment to Perma-Fix Northwest (PFNW). The waste will undergo treatment through macro-encapsulation at PFWN and the treated waste will be returned to the Hanford Site for disposal at the Mixed Waste Disposal Units in the low-level burial grounds.*



Photo 4

*The rolling road closure shipment begins on the Hanford Site with multiple pilot cars and at reduced speeds for transportation safety.*



Photo 5

*The rolling road closure leaves the Hanford Site with the Hanford Patrol escort after normal business hours to ensure the final leg of the drive on public roads to Perma-Fix Northwest is completed in compliance with the road closure plan agreed upon by the Department of Energy Richland Operations Office and the City of Richland.*



Photo 6

Hanford workers secure a box of mixed low-level waste for transportation to IMPACT Services in Tennessee for recycling. Another worker inspects the transportation vehicle for compliance with the Department of Transportation requirements. The treated residues 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<br><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>• 549 m<sup>3</sup> are staged, pending shipment</li> <li>• 936 m<sup>3</sup> shipped to a treatment, storage, or disposal facility</li> <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> |
| Retrieve 50 m <sup>3</sup> of suspect remote-handled TRU waste |  |

At Trench 17 of the 3A burial ground, pre-fabrication of a shoring box was completed for Box 26. Pre-fabrication of a shoring box for Box 80 and a roof for Box 27 continued. Box 27 was fogged for contamination control under a tarp that was installed for this process and the wood cover was removed as well. Mitigation and cleanup of the area around Boxes 26 and 27 were completed in preparation for excavation.

In Trench 11 of the 4B burial ground, two thorium drums (0.42 m<sup>3</sup>) were removed from the east end of the trench and staged in the 4C Process Area to be assayed. Hand/mechanical excavation was performed in section 4 of the trench and a contact-handled (CH) metal box (3.4 m<sup>3</sup>) was uncovered. Eight remote-

handled (RH) containers (10.6 m<sup>3</sup>) were shipped to CWC. In the 4C Process Area, the portable assay campaign began for nine waste containers.

At the 12B burial ground, nine drums were removed from Trench 27. Thirty-six drums were assayed in the Gamma Assay System, one drum was assayed in the Passive/Active Neutron Assay System, one box was assayed using the AREVA Portable Assay System, and two drums were x-rayed in the Real-Time Radiography System. In Trenches 17 and 27, workers excavated the contamination area to expose more drums in preparation for drum removal.

### TRU Repackaging & Shipments

| ACTIVITY  | SOLID WASTE STABILIZATION & DISPOSITION<br><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>• 784 m<sup>3</sup> have been repackaged</li> <li>• 1,323 m<sup>3</sup> have been disposed</li> </ul> |
| Disposition 2,000 m <sup>3</sup> of contacted-handled TRU waste |  |

Ten drums were repackaged at T Plant and five at WRAP for a total of 15 drums repackaged this week. In conjunction with the Central Characterization Program, four TRUPACT-II shipments left the Hanford Site bound for the Waste Isolation Pilot Plant (WIPP), for a total of 170 shipments completed since shipments resumed, thanks to Recovery Act funding, in March 2010.

One shipment (13 m<sup>3</sup>) was made from CWC to PFNW. The shipment included one box of TRU debris being sent to PFNW to be repackaged into SWBs or 55-gallon drums. The repackaged TRU waste will be returned to the Hanford Site for WIPP certification activities.

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

RL-0030.R1: Central Plateau Soil & Groundwater

| ACTIVITY  | WELL DRILLING & DECOMMISSIONING |   |
|---|---------------------------------|---|
|   | <i>Week of April 15, 2011</i>   | <i>Complete to Date with Recovery Act funds</i> |
| Install 265 wells and/or boreholes along the river and in the Central Plateau | 3 wells in progress             | 300   |
| Decommission 280 old wells and boreholes that are no longer of service        | 5 well completed                | 216   |

### 200 West Groundwater Treatment Facility

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

- *Process buildings*
  - Radiological Building: Ongoing activities included 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.
  - Bio Pad: Concrete formwork for the splitter box and main mechanical duct bank continued as did steel installation on the utility racks, hand rails, grating, conduit, sleeves, and cabling for lightning protection.
- *Transfer buildings*
  - Construction continued for the two extraction and two injection buildings with ongoing installation of piping, instrumentation and controls rough-in, and supply and exhaust fans.
- *Lime Building*
  - Activities continued for footings and underground conduit installation.

- *Construction Acceptance Tests*
  - Construction acceptance tests (CATs) are in progress for extraction wells and Extraction Building #1. Eleven other notices to initiate CATs were received from subcontractor Skanska USA Build, Inc.

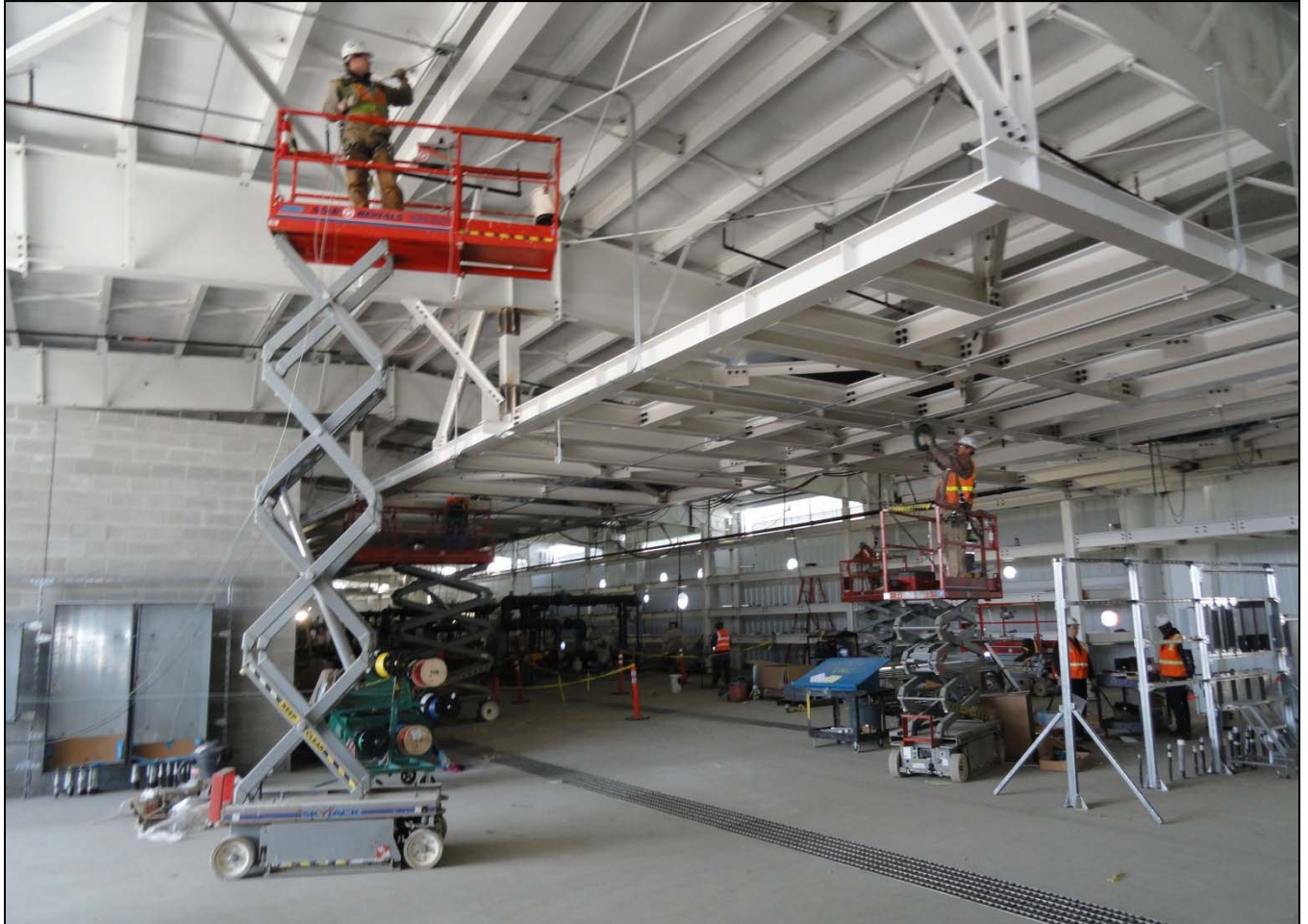


Photo 7

Workers continue construction of the Biological Process building for the 200 West Groundwater Treatment Facility. Work this week was focused on installation of electrical panels, switchgear, fire alarm, and exterior transformers.

## 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

- |   |  |
|---|--|
| • 211U Cold Chemical Makeup Tank Farm           | • 2734EA Gas Cylinder Storage Bldg           |
| • 211UA Cold Chemical Makeup Tank Farm Addition | • 275E Carpenter Shop Bldg                   |
| • 203UX Gas Storage Facility                    | • MO104 Mobile Office                        |
| • 2701M Office Bldg                             | • MO405 Mobile Office                        |
| • 272E Fabrication, Mockup Shop Bldg            | • MO840 Mobile Office                        |
| • 2716E Power Maintenance Storage Bldg*         | • X8 Motor Car Shed*                         |
| • 2722W Welding Laboratory Bldg*                | • 224U UO3 Plant Concentration/Load-out Bldg |
| • 224UA UO3 Calcination/Load-out Facility       | • 284WB Package Boiler Plant                 |
| • 2710W Coal Handlers Shed                      | • 209EA 90 Day Storage Pad                   |
| • 2701EC 209-E Guard Station                    | • 2902W Water Storage Tank                   |
| • 2902E Water Storage Tank                      |  |
|   | <b>TOTAL: ~108,951 square feet</b>           |

### PLANNED FOR D&D/IN PROGRESS

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

\*Not part of the Key Performance Parameter

### *U Canyon*

CHPRC crews and local subcontractors AGEC and Central Pre-Mix completed their successful “test pour” into the 221-U North Electrical Gallery, delivering a total of approximately 360 cubic yards of grout and encapsulating debris and filling test void spaces. The team then began filling the North Pipe Gallery, with approximately 50 cubic yards delivered so far. On the canyon deck, core drilling of six-foot grout conveyance holes into cell covers is 75 percent complete. The work will reduce the need to use the contaminated crane inside the canyon during future grouting operations.

### *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. Assembly of demolition equipment to reach the facility’s boilers is complete and the equipment is now staged at the 284-E site.



Photo 8

*Debris cleanup continues at the site of the former 284-E Power House structures that CHPRC demolished with explosives in March 2011. At left are the remains of the 284-E Power House that CHPRC is also demolishing. Only the boilers remain.*

#### *200 West Area Industrial Facilities*

Debris cleanup at the site of the explosive demolitions of the 284-W Power House stacks and baghouses is now complete. Asbestos abatement continued inside the 284-W Power House building, where workers completed work on the fifth floor of the building and the crusher house and conveyor structures. Abatement continues on the first and second floors. Demolition of the crusher house and lower conveyor is expected to begin next week.





Photo 9



Photo 10

*The 284-W Powerhouse before (photo 9) and after (photo 10) CHPRC demolished (from left to right) the baghouses, exhaust stacks, and boiler plant. Demolition on the main powerhouse building (right) will begin in stages as asbestos abatement is completed in the building's interior.*

*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. Three SWBs were loaded with TRU waste; two SWBs were shipped out. The cutting and removal of slab tanks in both rooms – the last major step before the facility can be downgraded to a Less Than Hazard Category 3 – is expected to begin this week.

## 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 now 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*

After the first application of wet grout to four railcars last week, CHPRC added another application of dry grout to capture residual liquids in the railcars and returned to complete a second application of wet grout to the railcars in preparation for their removal from the area. Meanwhile, preparations continue for the lift-and-haul of two locomotives and two cask cars to the B Reactor museum site for preservation and display in early May.



*Dry grout is placed in a railcar to capture residual liquids. The dry grout was preceded and followed by the application of wet grout.*

Photo 11



Photo 12

Wet grout is poured into a contaminated railcar in the 200 North Area. CHPRC is placing grout into the railcars to prepare them for removal and disposal at the Environmental Restoration Disposal Facility.

### Waste Sites

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

| WASTE SITE IN PROGRESS | TONS OF CONTAMINATED SOIL REMOVED |                                       |
|------------------------|-----------------------------------|---------------------------------------|
|                        | Week Ending April 15, 2011        | Total to Date with Recovery Act funds |
| BC Control Area        | 7,500                             | 380,000                               |

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

- 600-40: Additional sample testing is required and anticipated to occur in April.
- 600-218: Remediation activities are complete, contingent on sample activities.
- 600-220: Remediation activities are ongoing.
- 600-281: A cultural report was reviewed and further evaluation indicated this site may be remediated without affecting cultural sensitive areas. Field activities are anticipated to occur in late April.
- 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: Shipping to ERDF commenced after completion of the contract Department of Transportation vendor evaluation.
- 200-W-147-PL: Post-verification sampling is complete; laboratory analysis of results is in process. Backfill is anticipated to commence in April.
- *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 |  | PLANNED FOR D&D/IN PROGRESS |                          |
|---|--|-----------------------------|--------------------------|
| • 183KW Chlorine Vault                                  | • 116KE Reactor Exhaust Stack          | • 183.4KW Clearwell         | • 190KE Main Pump House  |
| • 183.1KW Headhouse                                     | • 118KE Horizontal Control Rod Storage | • 190KW Main Pump House     | • 1605KE Guard House     |
| • 183.3KW Filter Basin                                  | • MO048 Construction Lunch Trailer     | • 183.4KE Clearwell         | • 181KE River Pump House |
| • 183.7 KW Pipe Tunnel                                  | • MO969 Ops/HPT Change Trailer         |                             |                          |
| • 110KE Gas Storage Facility                            | • 115KE Gas Recirculation              |                             |                          |
| • 117KE Exhaust Air Filter Bldg                         | • 185-K Potable Water Treatment Plant* |                             |                          |

\*Not part of the Key Performance Parameter

#### *Facility D&D*

As demolition of the 120,000-square-foot 183.4-KW Clearwell nears completion, CHPRC began demolishing the nearly identical 183.4-KE Clearwell. D&D crews also began demolishing the 183.1-KE Headhouse. Demolition and loadout continued on the west side of the 105-KE Reactor building. At the 181-KE River Pumphouse Structure, with asbestos abatement complete and the containment structure removed, CHPRC crews began separating the structure's six 39,000-pound pumps in preparation for their removal by crane, now planned for late April.



Photo 13

*Heavy equipment enters the site of the 183.4-KE Clearwell to perform demolition of the 120,000-square-foot structure.*



Photo 14

*Demolition of the 183.4KW Clearwell is nearing completion. The structure was 120,000 square feet in size with a capacity of 20 million gallons.*



Photo 15

*CHPRC begins demolition of the 8,451-square-foot 183.1KE Headhouse. The building is part of the 100K East Reactor Water Treatment Facility complex, which is similar to the 100K West Reactor Treatment Facility complex that CHPRC demolished in 2010, also with Recovery Act funds.*





Photo 16

*Atop the 181-KE River Pump House, workers discuss plans for separating six 39,000-pound pumps from the structure.*



Photo 17

Workers are separating the 181-KE building's six 39,000-pound pumps in preparation for their removal by crane (left), now planned for late April.

#### *Infrastructure Utilities Upgrade Project*

The new 100-K potable water system is fully operational and online, joining the new fire-protection system, and K Area workers are now enjoying full water services onsite. The new A-9 substation is planned for activation in April.

#### *Waste Sites*

CHPRC continued excavating the 100-K-53 waste site, the 100-KE Glycol Heat Recovery Underground Pipelines, with 1,638 tons removed from the waste site last week, and a total of more than 13,600 tons removed to date. Remediation of the 116-KE-1 waste site is on hold pending sample results that are intended to provide data to develop a clear path forward for completing this waste site.

## UPCOMING EVENTS

### RL-0011 Nuclear Materials Stabilization & Disposition

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

- Complete D&D and remove the remaining gloveboxes from rooms 179 and 188 of PPSL.
- Remove conveyor gloveboxes HC-3 and HC-4 from the RMC Line.
- Complete cleanout of the 232A scrubber cell and disposition glovebox HA-46 in place.



- Remove exhaust duct work, 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

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

- One MLLW shipment (54.4 m<sup>3</sup>) planned from CWC to PFNW for treatment by macro-encapsulation.
- One MLLW shipment (2.7 m<sup>3</sup>) planned from CWC to PFNW for treatment by macro-encapsulation.
- One LLW shipment (6.9 m<sup>3</sup>) planned from CWC to PFNW for volume-reduction and radiological stabilization.

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

- TRU Retrieval
  - 3A burial ground
    - Remove 3A Trench 17 Boxes 26 and 27.
    - Complete pre-fabrication of shoring box for Box 80 and a roof for Box 27, both in 3A Trench 17.
    - Continue shipping some of the removed containers to CWC.
  - 4B/4C burial ground
    - Continue hand/mechanical excavation to uncover and remove (21.2 m<sup>3</sup>) of CH waste containers in 4B Trench 11.
    - Prepare to excavate, remove, and overpack RH waste containers (9 m<sup>3</sup>) in 4B Trench 11.
    - Perform Mobile Drum Venting System functional test to validate the operating procedure.
  - 12B burial ground
    - Continue 12B drum removal and trench excavation.
- TRU Repackaging and Shipments
  - Two planned shipments.
- Suspect TRU Waste Shipments
  - One TRU-mixed waste shipment (2.8 m<sup>3</sup>) planned from WRP to PFNW for repackaging.

## 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 Areas demolitions.
- Begin demolition of 284-W Power House crusher house and conveyor.
- Continue grouting of 221-U North Pipe Gallery and core-drilling of grout conveyance holes into cell covers inside U Canyon.

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**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 adding wet grout to contaminated well railcars.
- Begin field activities at the 600-281 waste site.
- Backfill the 200-W-147-PL waste site.
- Continue remediation of the 600-220 waste site.

**RL-0041 Nuclear Facility D&D – River Corridor Closure Project****RL-0041.R1.1: 100K Area Remediation**

- Continue D&D of the substructure around 105-KE Reactor Building.
- Continue demolition of the 183.4-KW and 183.4-KE Clearwells and 183.1-KE Headhouse.
- Complete preparations for removing by crane six pumps from the 181-KE River Pump House Structure.
- Continue excavating soil from and planning for remediation of 100K Area waste sites.