



AMERICAN RECOVERY & REINVESTMENT ACT

Week Ending April 1, 2011









CHPRC-01314

Contract DE-AC06-08RL14788 Modification MO47



# **Contents**

DVERVIEW	
SUMMARY	
ACCOMPLISHMENTS	Ę
RL-0011 Nuclear Materials Stabilization & Disposition	
RL-0011.R1: Plutonium Finishing Plant D&D	E
RL-0013 Solid Waste Stabilization & Disposition	
RL-0013C:R1.1: Mixed Low-Level Waste/Low-Level Waste Treatment	Ç
RL-0013C:R1.2: Transuranic Waste	10
RL-0030 Soil & Groundwater Remediation, Groundwater/Vadose Zone	14
RL-0030.R1: Central Plateau Soil & Groundwater	14
RL-0040 Nuclear Facility D&D – Remainder of Hanford	15
RL-0040.R1.1: U Plant/Other D&D	15
RL-0040.R1.2: Outer Zone D&D/Waste Sites	21
RL-0041 Nuclear Facility D&D – River Corridor Closure Project	22
RL-0041.R1.1: 100K Area Remediation	22
JPCOMING EVENTS	25



## **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.

For information about CHPRC, including weekly Recovery Act newsletters and videos, visit <a href="https://www.plateauremediation.hanford.gov">www.plateauremediation.hanford.gov</a> or contact <a href="mailto:chprcc@rl.gov">chprcc@rl.gov</a>.



### **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 <a href="https://www.youtube.com/hanfordplateau">www.youtube.com/hanfordplateau</a>.

### PLUTONIUM FINISHING PLANT D&D





# **ACCOMPLISHMENTS**

# RL-0011 Nuclear Materials Stabilization & Disposition

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

### **ACTIVITY**

### PFP WASTE REMOVAL & DISPOSITION

	Week of March 25, 2011	Completed to Date with Recovery Act funding
Gloveboxes/hoods removed	2	107 gloveboxes/hoods
MLLW/LLW shipped	7 m <sup>3</sup>	2,450 m <sup>3</sup>
TRU shipped	5 m³	505 m <sup>3</sup>
Non-radioactive waste shipped	-	23 m³
Process transfer line removed	10 feet	486 feet
Process vacuum system piping removed	-	1,210 feet
Asbestos removed		13,764 feet

### Process and Laboratory Areas

Non-destructive assay results on glovebox 145-1, the last glovebox in the Analytical Laboratory, indicate additional decontamination is unlikely to result in meeting LLW disposal criteria, and it will need to be disposed of as TRU waste. Since the glovebox is too large to transport through the 234-5Z building corridors and it meets the acceptance criteria for size reduction at Perma-Fix Northwest (PFNW), it will likely be dispositioned in place until the building is declared operationally clean, when it will be removed through the outer wall of the building and loaded for shipment to PFNW.

In the Plutonium Process Support Laboratory (PPSL), gloveboxes 179-10, -11, and -12 are on lift tables and staged for removal from the room. Gloveboxes 179-2, -3, and -4 were separated from each other with two of the three removed from building ventilation. Three of the eight gloveboxes in Room 179 meet LLW criteria and are small enough to be removed from the room for disposal. The remaining gloveboxes will be staged for size reduction in PPSL until door and wall modifications are completed and an alternate location is established to store them. All nine of these gloveboxes are expected to be removed or staged for size reduction by mid-April. The last of the 21 gloveboxes originally installed in PPSL, glovebox 179-1, is scheduled to be completed in the third quarter.

In the Remote Mechanical C Line, work to remove the HC-4 glovebox and the last of three sections of attached conveyor glovebox HC-3 were suspended when high levels of contamination were encountered. The two gloveboxes are now expected to be removed by mid-April. In the Remote Mechanical A Line, preparations are complete to remove two columns supporting a mezzanine early next week. Removing the columns will enable gloveboxes HA-19B1 and -B2 to be removed from room 235B.

Disposition of three gloveboxes in place in the former Radioactive Acid Digestion Test Unit area is nearing completion. All three gloveboxes were verified as LLW and can be disposed of with the building debris. The interiors of two of the gloveboxes were painted in preparation for removing them from building ventilation. The crew also separated a large de-mister tank from glovebox 300, tapped a large 3-inch drain line to verify it contained no residual liquid, and size reduced the line for disposal.

### 2736-Z/ZB Vault Complex

The vault complex D&D team size reduced the glovebox exhaust ductwork removed last week and is preparing to remove the last 30 feet known to require removal. Upcoming coupon sampling and characterization of the less contaminated ductwork will identify any additional sections that need to be removed. Excess materials and equipment are being removed from the 2736-ZB building. A backup generator is scheduled to be installed over the weekend to support emergency power requirements for the 291-Z exhaust facility, enabling electrical deactivation of the adjacent 2721-Z building scheduled to be demolished along with the vault complex later this year.





A worker directs a truck delivering the first of two portable power substations to the Plutonium Finishing Plant (PFP). The substations will provide temporary power to support demolition of the former PFP process facilities.





Photo 2

A portable power generator is being installed to support the 291-Z facility while the vault complex is demolished this spring.

## 242-Z Americium Recovery Facility

The 242-Z D&D team continued size reducing the WT-4 and WT-5 gloveboxes, with WT-4 about 80 percent complete and WT-5 about 90 percent complete.





Photo 3 Gloveboxes in the 242-Z Americium Recovery Facility at the Plutonium Finishing Plant during size reduction. CHPRC is size reducing, or cutting up, the gloveboxes so that they can be removed from the facility and shipped for disposal.





Photo 4

A close-up on glovebox WT-4 in the 242-Z Americium Recovery Facility. The glovebox is being size reduced with Recovery Act funds and is now more than 80 percent complete. The glovebox is one of five gloveboxes CHPRC plans to remove from the 242-Z building, one of the most contaminated facilities at the Plutonium Finishing Plant.

Infrastructure, support systems, and equipment removal

The process transfer line crew removed the last 10 feet of piping from their current work segment and will begin removal of a new segment next week. Work to install two, trailer-mounted 1500 KVA transformers for temporary power continued. The transformer on the north side of the 234-5Z building is nearing completion and should be energized next week.

# RL-0013 Solid Waste Stabilization & Disposition

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

**ACTIVITY** 

Ship 1,800 m<sup>3</sup> of MLLW/LLW for treatment and disposal

SOLID WASTE STABILIZATION & DISPOSITION

Total Completed with Recovery Act funds

\_\_\_\_\_\_

- 1,306 m³ shipped
- o 1,109 m³ treated and disposed
- 197 m³ at offsite treatment facilities awaiting processing. Treatment is scheduled for FY11

One shipment was sent from the Central Waste Complex (CWC) to IMPACT Services in Tennessee for processing. The shipment (6.4 m<sup>3</sup>) included MLLW debris contaminated with sodium metal that will be



recycled. The residual waste that cannot be recycled from the shipment will be returned to the Hanford Site for disposal in the Mixed Waste Disposal Units at the low-level burial grounds.



Photo 5

Hanford workers secure a load of mixed low-level waste debris to be shipped to IMPACT Services for recycling. The processed residues will be returned to the Hanford Site for disposal in the low-level burial grounds Mixed Waste Disposal Units.

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

### ACTIVITY

Retrieve 2,500 m³ of suspect TRU waste

Retrieve 50 m³ of suspect remote-handled TRU waste

### SOLID WASTE STABILIZATION & DISPOSITION Total Completed with Recovery Act funding

- 511 m3 are staged, pending shipment
- 878 m³ shipped to a treatment, storage, or disposal facility
- 18 m<sup>3</sup> are staged, pending shipment.
- 62 m³ shipped to a treatment, storage, or disposal facility

This week, CHPRC completed a Key Performance Parameter to retrieve 50 m<sup>3</sup> of remote-handled (RH) TRU waste from the Hanford Site. In comparison to contact-handled (CH) TRU, RH-TRU waste requires additional radiation dose controls (e.g., time, distance, shielding) for worker protection. CHPRC planned to retrieve 50 m<sup>3</sup> of RH-TRU by the end of fiscal year 2011 and has surpassed that target, having shipped 62 m<sup>3</sup> to a treatment, storage, or disposal facility (of which 61 m<sup>3</sup> was shipped in the month of March).

At Trench 17 of the 3A burial ground, the last container, Box 23, was assayed. Box 22 (32.6 m<sup>3</sup>) was



shipped to CWC. Waste retrieval workers completed the excavation of Box 24, installed lifting plates, lifted the shoring box base into the trench, and removed the box (54.4 m³) from the trench. Pre-fabrication of a shoring box for Box 26 was initiated. A bench was constructed on the south side of Trench 17 to provide crane access for lifting Box 27 with a crane. The last three RH culverts (21.8 m³) from Trench 8 were shipped to CWC.

At the 4B burial ground, the mechanical and hand excavation is completed around two CH Thorium drums (.4 m³), which are now ready to be removed from Trench 11. Mechanical excavation and hand excavation were initiated to locate and uncover 11 CH metal containers (31.8 m³), also in Trench 11. The ground penetrating radar sub-surface scans of an additional portion of Trench 11 were completed to update map data prior to excavation.

At the 12B burial ground, five drums and one box were removed from Trench 27. Ten drums were x-rayed in the Real-Time Radiography System and eight drums were vented. Two drums were assayed in the Passive/Active Neutron System that had indeterminate gamma assay results.



Photo 6

A shoring base is prepared for Box 24, a box of transuranic waste in Trench 17 of the 3A burial ground. The base will provide support to the aged container as it is lifted from the trench and prepared for shipment.





Workers guide Box 24, a box of transuranic waste, as it is lifted from Trench 17 of the 3A burial ground. Removing this and other containers of transuranic waste from the trenches in the 200 West Area is part of CHPRC's goal to remove 2,500 cubic meters of transuranic waste from the Hanford Site by the end of fiscal year 2011.



Box 24, a box of transuranic waste, is lowered onto a platform after being removed from Trench 17 of the 3A burial ground.

TRU Repackaging & Shipments

### ACTIVITY

Repackage 850 m<sup>3</sup> of WIPP certifiable TRU waste Disposition 2,000 m<sup>3</sup> of contacted-handled TRU waste

### SOLID WASTE STABILIZATION & DISPOSITION Total Completed with Recovery Act funding

- 708 m³ have been repackaged
- 1,201 m³ have been disposed

Fifteen drums were repackaged at T Plant and seven at the Waste Receiving and Process facility for a total of 22 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 163 shipments completed since shipments resumed, thanks to Recovery Act funding, in March 2010.

Two shipments (49.4 m<sup>3</sup>) were made from CWC to PFNW. The shipments included two boxes of TRU debris that will be repackaged into standard waste boxes 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

#### ΛΟΤΙΛΙΤ

#### WELL DRILLING & DECOMMISSIONING

Week of April 1, 2011	Complete to Date with Recovery Act funds
3 wells in progress	300
5 well completed	207
	3 wells in progress

### 200 West Groundwater Treatment Facility

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

- Process buildings
  - o Radiological Building: Activities included process piping rough-in overhead as well as in the trenches, lighting and power conduits overhead as well as installation of exterior transformers, and rough-in for controls with the mechanical ductbank.
  - o Bio-Process Building: Installation of electrical panels, switchgear, fire alarm, and exterior transformers continued. All major process equipment is placed.
  - o 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
  - o Construction of the two extraction and two injection buildings included installation of piping, instrumentation and controls rough-in, and supply and exhaust fans.
- Lime Building
  - o Installation of footings and underground conduit continued.





Piping supports are hoisted to support construction of the 200 West Groundwater Treatment Facility.

Photo 9

# 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
- 211UA Cold Chemical Makeup Tank Farm Addition
- 203UX Gas Storage Facility
- 2701M Office Bldg
- 272E Fabrication, Mockup Shop Bldg
- 2716E Power Maintenance Storage Bldg\*
- 2722W Welding Laboratory Bldg\*
- 224UA UO3 Calcination/Load-out Facility
- 2710W Coal Handlers Shed
- 2701EC 209-E Guard Station
- 2902E Water Storage Tank

- 2734EA Gas Cylinder Storage Bldg
- 275E Carpenter Shop Bldg
- MO104 Mobile Office
- MO405 Mobile Office
- MO840 Mobile Office
- X8 Motor Car Shed\*
- 224U UO3 Plant Concentration/Load-out Bldg
- 284WB Package Boiler Plant
- 209EA 90 Day Storage Pad
- 2902W Water Storage Tank

TOTAL: ~108,951 square feet

# 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 a successful "test pour" of 144 cubic yards of grout into the 221-U North Electrical Gallery, with grout flowing into test barrels as



expected and encapsulating debris placed in the room. On the canyon deck, core drilling continued of six-foot grout conveyance holes into cell covers to reduce use of the contaminated crane inside the canyon during future grouting operations. CHPRC subcontractor Watts Construction continued hauling clean rubble from the site of the demolished 183-KW Sedimentation Basins in the 100K Area to the U Canyon site in preparation for the building's demolition.



Photo 10

The first grout truck arrives from the onsite batch plant for a test pour at the U Canyon building.





Quality control personnel with subcontractor Intermountain Testing check a sample of grout before it is pumped into the 221-U North Electrical Gallery of U Canyon.

Photo 11





A CHPRC project engineer checks the result of a test pouring of grout into the 221-U North Electrical Gallery of the U Canyon. The grout successfully filled void spaces and encapsulated staged debris in the gallery.

# 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 switched to debris cleanup and site preparation for the upcoming removal of the structure's boilers.





Photo 13

Debris cleanup continues at the site of former industrial structures associated with the 284-E Power House.

### 200 West Area Industrial Facilities

Debris cleanup at the site of the explosive demolitions of the 284-W Power House stacks and baghouses continued this week, along with asbestos abatement inside the 284-W Power House building, where workers completed work on the fifth floor of the building and are nearing completion of abatement of the conveyor structure and second floors.





Debris cleanup continues outside the 284-W Power House where CHPRC used explosives to safely lower two exhaust chimneys and two baghouses on Feb. 18.

### 209-E Criticality Mass Laboratory

CHPRC crews performed a loadout of LLW as preparations continued for the cutting and removal of slab tanks from the facility, the last major step before its downgrade to Less Than Hazard Category 3. A runthrough of the tank-cutting procedure was performed, with an internal review of the effectiveness and safety of the procedure planned for next week.



Crews demonstrate procedures to take on the 209-E Criticality Mass Laboratory's last major hazard: the highly contaminated slab tanks that have to be size reduced and removed before the building can be downgraded to a nonnuclear facility and then demolished by September.

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

### OUTER ZONE FACILITIES DEMOLISHED WITH RECOVERY ACT FUNDS

212P Electrical Storage & Transformer Shop

212R Storage Building

614 Monitor Station

646 Radioecology Field Laboratory

6652G ALE Field Storage Building

6652H ALE Laboratory 1

6652I ALE Headquarters

6652J ALE Laboratory II

6652S Sentry Shed\*

6634 ENW Tower and Building\*

6635 Crown Castle/Cingular Tower and Building \*

6637 Tri City Amateur Radio Tower and Building\*

6632 Verizon Telephone Enclosure\*

6652R Acid Storage Shed 6652C Space Science Laboratory

6652M Fallout Laboratory

6652CSHED Storage Building

6652D Pump House

6652T Fire Protection Lower Pump House 6652U Rattlesnake Mountain Upper Pump House

623A Plant Radio Relay Bldg T520-6 Navy MARS Radio Station 6631 Radio Telescope Pedestal\*

6630 Hodges Well Pumphouse\*

6636 Columbia Communication Tower and Building\* 6633 Franklin County Communication Building\*

\*Not part of the Key Performance Parameter

North Slope Debris Removal

Personnel with CHPRC subcontractor Sealaska Environmental Services completed cleanup of the last 23



debris sites in Area 16. Areas 12 and 15 are also complete. Work continues in Area 18 next week.

### 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 continued preparing for the planned May delivery of two locomotives and two cask cars to the B Reactor museum site for preservation and display. Preparations for the first addition of wet grout to the cars to fix contamination and reduce dose are under way, with the first pour planned for this week.

### Waste Sites

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

WASTE SITE IN PROGRESS	TONS OF CONTAMINATED SOIL REMOVED	
WASTE SITE IN PROGRESS	Week Ending April 1, 2011	Total to Date with Recovery Act funds
BC Control Area	7,000	367,000

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

- o 600-40: Additional sample testing is required and is anticipated to occur in April.
- o 600-218: Remediation activities are complete, contingent on sample activities.
- 600-220: A work package is in preparation with remediation anticipated in mid-April.
   Further evaluation indicated this site may be remediated without affecting cultural sensitive areas.
- o 600-281: A cultural report was reviewed and further evaluation indicated this site may be remediated without affecting cultural sensitive areas.
- 600-282: Remediation field work is in process.
- o 216-S-19: Direct push test sampling is complete. Preliminary results are being reported from the laboratory and are under review.
- 216-S-26: Excavation commenced with the overburden removed. Shipping to ERDF will commence after completion of the ongoing contract Department of Transportation vendor evaluation.
- 200-W-147-PL: Post-verification sampling is complete; laboratory analysis of results is in process.
- BC Control Area
  - Altogether, approximately 140 acres of Zone A have been remediated with ongoing removal of hot spots. Seeding of 140 acres was performed by CHPRC and subcontractors Wildlands Inc. and Ojeda Business Ventures LLC.

# 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
- 116KE Reactor Exhaust Stack
- 118KE Horizontal Control Rod Storage
- MO048 Construction Lunch Trailer
- MO969 Ops/HPT Change Trailer
- 115KE Gas Recirculation

### PLANNED FOR D&D/IN PROGRESS

- 183.4KW Clearwell
- 190KW Main Pump House
- 183.4KE Clearwell
- 181KE River Pump House
- 117KE Exhaust Air Filter (subgrade structures)
- 190KE Main Pump House
- 1605KE Guard House



Facility D&D

Draining of the 183.2-KE Sedimentation Basins and the 183.4-KE and 183.4-KW Clearwells are now complete. Demolition of the 120,000-square-foot, below-ground 183.4-KW Clearwell began, with crews breaking through the structure's roof and "ramping in" to begin demolition of the facility itself.

At the 105-KE reactor building, demolition and loadout of the 100-K-56 tunnel at the reactor's north-west corner continued, while at the 181-KE River Pumphouse Structure, asbestos abatement is now under way. CHPRC subcontractor Watts Construction crews continued hauling clean rubble from the demolished 183-KW Sedimentation Basins to U Canyon and returning with clean soil to use as backfill for the sedimentation basin site.



Photo 16

CHPRC begins demolition of the 183.4KW Clearwell, a 120,000-square-foot, below-ground water storage facility.





Photo 17

Debris from the demolition of 183-KW Sedimentation Basins, which CHPRC demolished in 2010, is loaded for transfer to the U Canyon work site, where it will be used for fill and construction of an engineered barrier as part of the eventual demolition of the canyon building.

### Infrastructure Utilities Upgrade Project

Super-chlorination of the new 100K Area potable-water system has begun, with sampling and testing taking place this week. The new 100K fire-protection system is now complete and fully operational, and new control power transformers have been installed at the A-9 substation in preparation for the planned activation of the substation in April.

### Waste Sites

CHPRC continued excavating the 100-K-53 waste site, the 100-KE Glycol Heat Recovery Underground Pipelines, with 1,681 tons removed from the waste site last week, and a total of more than 12,000 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 size reduction of glovebox HA-22B.
- Isolate the last glovebox in the Analytical Laboratory, 145-1, and stage it for removal.
- Complete D&D and remove eight of the nine gloveboxes from room 179 of the PPSL.
- Complete cleanout and remove glovebox 188-1 from the PPSL
- Remove conveyor gloveboxes HC-3 and HC-4 in the RMC Line.
- Remove gloveboxes HA-19B1 and B2 from room 235-B of the RMA Line.
- Prepare the three gloveboxes remaining in room 235-D for disposition in place.
- Complete cleanout of the 232 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.
- 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 (3.2 m<sup>3</sup>) planned from the Waste Retrieval Project to PFNW for treatment by macro-encapsulation.

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

- TRU Retrieval
  - o 3A burial ground
    - Remove 3A Trench 17 Boxes 25 and 26.
    - Complete mitigation of contamination and down-post high contamination area around 3A Trench 17 Box 27.
    - Complete pre-fabrication of remaining shoring boxes for Boxes 26 and 80.
  - 4B/4C burial ground
    - Remove two concrete-lined CH drums and begin excavation around large concrete Box 105 in 4B Trench 11.
    - Begin excavation at the west end of 4B Trench 11 and continue excavating to uncover 11 metal containers (~32 m<sup>3</sup>).
    - Build and install internal securements for eight RH concrete boxes in the concreteshielded overpacks and complete shipment preparations.
    - Install bolts on two RH 9 x 5 x 5 ft waste containers and complete shipment preparations.
    - Begin Mobile Drum Venting System preventive maintenance work packages and revise operating procedure SW-100-154 to incorporate a gas chromatograph.
  - 12B burial ground
    - Continue excavation and drum removal from 12B Trenches 27 and 17; approximately 215 drums remain in 12B Trench 27.
    - Continue processing of removed 12B containers.
- TRU Repackaging and Shipments
  - o Four planned shipments
  - Suspect TRU Waste Shipments
    - o Two TRU-mixed waste shipments (29.4 m<sup>3</sup>) planned from CWC 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 and 200 West Areas demolitions.
- Finalize cutting procedure for contaminated slab tanks inside the 209-E Criticality Mass laboratory.
- Complete two more pours of grout to fill North Electrical Gallery test-pour room.
- Continue core-drilling of grout conveyance holes into cell covers inside U Canyon.

### 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.
- Begin adding wet grout to contaminated well railcars.
- Perform additional sample testing of the 600-40 waste site.
- Begin remediation of the 600-220 waste site.
- Complete remediation of the 600-218 waste site.

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

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

- Complete draining of 183-KE Sedimentation basins.
- Begin demolition of 183.4-KE and 183.4-KW Clearwells.
- Continue D&D of substructure around 105KE Reactor Building.
- Complete super-chlorination and testing of the new 100K potable water system.
- Continue excavating soil from and planning for remediation of 100K Area waste sites.

