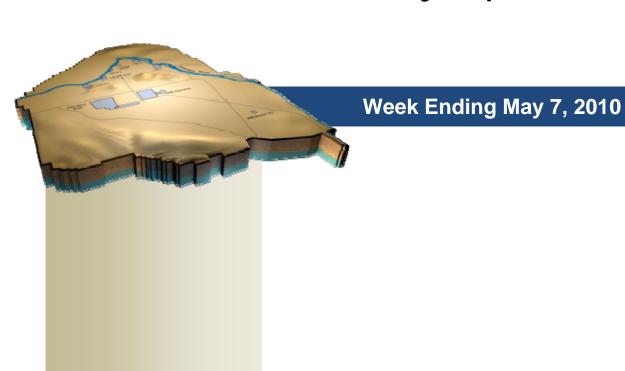


# **ARRA** Weekly Report



May 11, 2010 Contract DE-AC06-08RL14788 Modification M047 CHPRC1005-07

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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 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

To date, 60 glove boxes and laboratory hoods have been removed from their original locations at PFP with Recovery Act funds. Of those, 47 have been shipped out of PFP for treatment or disposal. Eight are loaded and awaiting shipment and five are staged for size reduction and disposal as TRU waste. CHPRC has now shipped more than 1,100 cubic meters of waste from PFP with support from Recovery Act funds, including approximately 950 cubic meters of MLLW and LLW, 130 cubic meters of TRU waste, and 22 cubic meters of non-radioactive waste.

#### Laboratory & Process Areas

Glove box HC-60 in the RMC Line is ready to be transferred to waste operations. A nearby doorway is being enlarged to support removal of the glove box as a single unit. Widening of the doorway began this week and should be complete in another week.

A large steel plate with dozens of penetrations was removed from glove box HC-230C-3, enabling the glove box to be decontaminated to a level that will permit transportation and disposition as LLW. Removal of glove box HC-230C-3 will require enlargement of doorway 638.

Also in the RMC Line, final corrective actions were completed in response to the nitric acid exposure in room 227 (March), and the crew is preparing to resume work on glove box 227-S.

The last four hoods were removed from the Standards Laboratory and transferred to Solid Waste Operations for packaging and on-site disposal as LLW at the Environmental Restoration Disposal Facility (ERDF).

The crew in the Plutonium Process Support Laboratory is preparing to work on two hoods in room 180 and a large glove box in room 188. Three inter-connected glove boxes are ready to be removed from room 136 of the Analytical Laboratory through a previously widened doorway. The glove boxes will require non-destructive assay (NDA) measurements to confirm eligibility for disposal as LLW.





The last hoods and glove boxes from the Standards Laboratory are being packaged for shipping and disposal. As of May 7, 2010, CHPRC has removed 60 glove boxes and laboratory hoods and shipped more than 1,100 cubic meters of waste from the Plutonium Finishing Plant with support from Recovery Act funds.

Photo 1

#### 2736-Z/ZB Vault Complex

Contamination fixative was applied to the interior of the main glove box in room 636 and grout ports were installed to support on-site disposal as LLW.

An approved Safety Evaluation Report was received from DOE-Richland Operations Office (DOE-RL) for transiting the vault complex facilities to the D&D Documented Safety Analysis; implementation activities are expected to be completed within two months.



#### 242-Z Americium Recovery Facility

The 242-Z crew completed installation of upgraded containment tents in the 242-ZA annex and 242-B corridor to support access to the control and tank rooms, respectively. An entry was completed to begin removal of remaining combustibles in the tank room.



The upgraded containment tent CHPRC recently installed in the 242-ZA annex at the 242-Z Americium Recovery Facility of the Plutonium Finishing Plant. The tent provides a sealed entry way into the control room.





After passing through the containment tent (photo 2), workers enter the 242-Z control room. The mezzanine of the control room is shown here, where hundreds of mechanical isolations will be required to prepare the room for future demolition. In the control room, workers are preparing to apply fixative to reduce airborne contamination to allow for the use of powered air purifying respirators (PAPRs) as opposed to supplied air. These actions will reduce the hazards faced by workers and increase efficiency during cleanout and removal of process equipment.

Infrastructure, process support systems, and equipment removal Final performance evaluations were completed for D&D of 5,000 feet of heavily contaminated process vacuum system piping throughout the 234-5Z and 291-Z buildings. Improvements to the field work documents are in progress and the Hazard Review Board meeting will take place the week of May 10.

A Master Task Contract was awarded to grout up to 15 of the 54 trenches containing process drain lines formerly connected to glove boxes and hoods in the 234-5Z building. The trenches must be filled to support the weight of glove boxes and heavy waste containers as they are removed from the building.

NDA measurements were performed on a process solution transfer line; approximately 50 feet were measured last week. Field NDA of the 1,150 feet of transfer line is now 30 percent complete.

The NDA crews began measurements on drain lines below room 172, which will be modified to serve as a size-reduction station for glove boxes and other process equipment disposed of as TRU waste.



Two waste shipments were sent from PFP, including seven cubic meters of LLW to ERDF and 19 drums of TRU waste to the Waste Receiving and Processing Facility (WRAP).

PFP insulators removed 100 feet of asbestos insulation from radiologically controlled areas in the 234-5Z building last week, bringing the total removed with Recovery Act funds to more than 9,300 feet.



A shipment of 19 drums of transuranic waste removed from the Plutonium Finishing Plant was loaded onto a truck and sent to the Waste Receiving and Processing Facility. With Recovery Act funding, CHPRC has shipped approximately 130 cubic meters of TRU waste from the Plutonium Finishing Plant.

# RL-0013 Solid Waste Stabilization & Disposition

RL-0013C:R1.1: MLLW Treatment

Of the 1,800 m<sup>3</sup> of MLLW and LLW planned for treatment and disposal under the Recovery Act:

- 940 m<sup>3</sup> of MLLW and LLW have been shipped to date including:
  - o 578 m<sup>3</sup> that have been treated and disposed.
  - o 362 m<sup>3</sup> at off-site treatment facilities awaiting processing. Treatment is scheduled for FY10.

Two shipments of waste were sent out for treatment this week. The first shipment included 11 drums (2.3 m³), three of which are MLLW and eight of which are remote-handled MLLW, sent from the Central



Waste Complex (CWC). This shipment was sent to Perma-Fix East and will be thermally treated through the vacuum thermal desorption process. The resulting condensate will be put in an industrial furnace to thermally destroy the Resource Conservation and Recovery Act organics and polychlorinated biphenyls. The second shipment consisted of 26 drums (7.8 m³) of MLLW debris, previously classified as TRU waste, sent from WRAP to Perma-Fix Northwest (PFNW) to be non-thermally treated through macroencapsulation and packaged for disposal in Hanford's Mixed Waste Disposal Units. Both shipments were sent out on May 6.

RL-0013C:R1.2: TRU Waste

TRU Retrieval

The Retrieval Corrective Action Plan for 4B Trench 11 was presented to DOE-RL.

The Waste Retrieval Group performed work in support of upcoming activities in the 3A Burial Grounds for Trench 17. Set-up began for a newly received restroom trailer and a walk-down was performed on the Box 3 checklists with the help of industrial hygienists (IHs), radiological control technicians (RCTs), nuclear chemical operators (NCOs), field work supervisors, carpenters, and the engineering group. The team also supported a Global Positioning System survey of the trench along with a review and Automated Job Hazard Analysis for the repackaging work packages for Boxes 80 and 82.

Planning continued for the 3A Burial Grounds Trench 8 start-up and work continued on the 4B Burial Grounds Trench 11 Recovery Plan for moving the boundaries inward. NCOs, RCTs, and IHs also performed a mock-up entry to survey and place SUMMA canisters in preparation for performing the actual task in protective equipment.

The transfer of documentation is complete for bringing existing secondary waste containers into compliance with new procedure SW-100-135.

#### Alpha Caisson Retrieval Project

Preparation for the Baseline Change Request (BCR) continued, 30 percent of the design on the Waste Retrieval System was received on May 5, and the revised Project Execution Plan was completed on May 7 and issued to procedures for final approval and release. Facilitated sessions with AREVA were held to upgrade and reformat the Acquisition Plan. The ARES Corporation is upgrading its Acquisition Plan per comments provided by CHPRC.

#### TRU Project Drum Repackaging

Of the 850 m<sup>3</sup> planned to be characterized and repackaged with funding from the Recovery Act:

- 1.297 drums (269.8 m<sup>3</sup>) have been repackaged.
- 32 TRUPACT-II shipments [1,168 55-gallon drums, 24 standard waste boxes, and two ten-drum over packs (290.3 m³)] have been shipped.





A TRUPACT-II shipment is ready for departure from the Waste Receiving and Processing Facility. The shipment will go to the Waste Isolation Pilot Plant. As of May 7, 2010, CHPRC has completed 32 shipments since March 2010.

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

RL-0030.R1: Central Plateau Soil & Groundwater

#### Well Drilling & Decommissioning

Planning continued for installing wells at 100-KR-4, 100-HR-3, 100-BC-5, and 300-FF-5. The following table showcases recent progress in well drilling and decommissioning.

| Operable Unit | Scope<br>(Wells to be drilled with Recovery Act funding)   | In<br>progress | Drilled to<br>Total Depth <sup>1</sup> | Completed or<br>Developed <sup>2</sup> |
|---------------|--|----------------|--|--|
| 100-NR-2      | Expand the apatite barrier to better contain a strontium-90 plume along the Columbia River (171 wells)   | 171            | 171                                    | 111                                    |
| 100-HR-3      | Support the optimization of removal of chromium (16 wells)   | 14             | 14                                     | 14                                     |
| M-24          | Support characterization of the aquifer (5 wells)  | 2              | 2                                      | 2                                      |
| 200-ZP-1      | Support the 200 West Groundwater Treatment Facility that will primarily treat carbon tetrachloride contamination in the groundwater (17 wells) | 12             | 10                                     | 6                                      |
| Site-wide     | Decommission wells that are no longer of service <sup>3</sup> (350 wells)  |                |  | 86                                     |

<sup>&</sup>lt;sup>1</sup>Wells are drilled to varying depths to address contaminants at different depths in the soil.

installed to indicate where the well was previously located.



<sup>&</sup>lt;sup>2</sup>When 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 such as sand or clay), the casing is removed, and a cap or marker is



Drilling rigs at the final wells being drilled in the 100-NR-2 operable unit along the banks of the Columbia River, where CHPRC has drilled to total depth all 171 wells that were planned for installation with Recovery Act funding. Once completed, the wells will be injected with the mineral apatite to better contain a strontium-90 contamination plume in the soil.

#### 200 West Groundwater Treatment Facility

A General Contractor was selected for the construction of the main facility. The project has started issuing design media for final review. Recent progress on the project also includes:

- Completion of 35 road crossings
- Fabrication of 15 electrical power racks for operating equipment at extraction well locations
- Placement and welding of approximately 50 percent of the first phase of high-density polyethylene (HDPE) piping.

The construction contractor for completing the extraction buildings continued civil site work for Extraction Building 1 and initiated civil site work for Extraction Building 2.



#### DX Groundwater Treatment Facility

Electrical, mechanical, and process equipment is being installed in the process and two transfer buildings comprising the DX Groundwater Treatment Facility. The progress is listed below. The last two resin or treatment tank units arrived last week. Four resin tank units are already in place.

| Building                     | Electrical<br>Equipment<br>(% complete) | Mechanical<br>Equipment<br>(% complete) |  |
|------------------------------|---|---|--|
| Process                      | 65%                                     | 70%                                     |  |
| Transfer (M1)                | 90%                                     | 100%                                    |  |
| Transfer (M2)                | 65%                                     | 70%                                     |  |
| Electrical Power Rack Tie-In |   | 25%                                     |  |
| HDPE Piping Installation     |   | 74%                                     |  |



The remaining treatment tanks arrive from the vendor for installation in the process building of the DX Groundwater Treatment Facility that CHPRC is constructing with Recovery Act funding. The tanks will be part of an innovative resin treatment system that is expected to save \$20 million in lifecycle costs.





Workers prepare the rigging to lift the newly arrived treatment tanks off of a truck outside of CHPRC's DX Groundwater Treatment Facility that is under construction with \$20 million in Recovery Act funding. The tanks will be part of an innovative system that will have the capacity to treat groundwater contaminated with hexavalent chromium.



Workers direct a crane as it hoists a set of treatment tanks outside of the main process building of the DX Groundwater Treatment Facility.
CHPRC constructed the process building as well as two transfer buildings with Recovery Act funding.

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

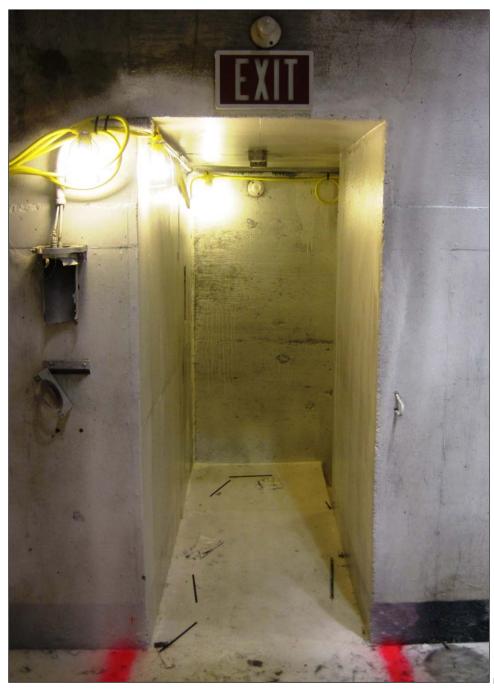
RL-0040.R1.1: U Plant/Other D&D

#### U Canyon

Annual mechanical and electrical maintenance is being performed on the bridge crane. In the interim, smaller items are being hand-loaded into the process cells. Repairs to the electrical busbars will also occur during the crane outage. A concerted effort is under way to address Life Safety Code issues including exit signs, emergency lights, handrails, and egress paths. This will enable access to the cells in the southern



end of the canyon. A statement of work for grout supply and conveyance is being finalized. In addition, a statement of work is being issued for procuring a cask to support transfer of the D-10 tank to T Plant.



Exit signs and emergency lights are being installed in the U Canyon to ensure worker safety and bring the facility into compliance with current Life Safety Code requirements during CHPRC's Recovery Actfunded effort to prepare the canyon for a first-ofits-kind demolition.



#### U Plant Ancillary Facilities

Workers are preparing the 224-U and 224-UA ancillary facilities for demolition to begin in late spring. Equipment previously used for asbestos abatement is being cleaned up and demobilized. Inspections and fixative application is ongoing for locations where potential contamination might be held up, such as in piping.

#### 200 East Core Industrial Area

Cold and dark activities as well as asbestos abatement on exterior piping continued at the 284-E Powerhouse. Construction of the asbestos containment systems and scaffolding within the Powerhouse is on hold pending completion of cold and dark activities. Demolition of mobile office MO-840 is complete. Demolition of MO-104 will wrap up next week after site cleanup and demobilization of equipment from the site is complete.

#### 209-E Criticality Mass Laboratory

Internal review of the Documented Safety Analysis (DSA) and related documents is complete and final comments are being incorporated in preparation for approval and transmittal to DOE. Work continued on the procurement and installation of items needed to upgrade the facility exit signs, lighting, fire extinguishers, and emergency lights to meet Life Safety Code requirements. Additional areas for radiological survey and measurement were identified and once entries resume, these areas will be surveyed to support the waste classification of the miscellaneous equipment.

#### RI -0040.R1.2: Outer 7one D&D/Waste Sites

#### Arid Lands Ecology Reserve (ALE) D&D

Contouring of the sites of the former lower ALE facilities is complete. Demolition preparations on six upper ALE facilities are also complete and workers and equipment are mobilizing to the site. Demolition kicked off last week with demolition of the 6652-C Shed (storage building) and the 6652-D Pump House.





The 6652-C Shed on the upper Arid Lands Ecology (ALE) Reserve before demolition. The building served as a storage shed when the ALE Reserve was in operation as a buffer zone for anti-aircraft defense missions for the U. S. Army.



The 6652-C Shed (storage building) on the upper Arid Lands Ecology Reserve during demolition. CHPRC demolished this approximately 230-square-foot structure in a matter of minutes during the week ending May 7, 2010. The debris is being loaded into a container for disposal at the Environmental Restoration Disposal Facility.

#### 212-NPR Interim Fuel Storage Building D&D

A press release issued May 10, 2010 announced the completed demolition, backfilling, and contouring of the 212-N, 212-P, and 212-R buildings, which once stored freshly irradiated fuel rods from Hanford's plutonium production reactors during the Cold War. This \$12.5 million Recovery Act project has demolished more than 29,000 square feet of radioactively contaminated building space.



Photo 13



One of the three 212-NPR building sites before (photo 13) and after demolition, backfilling, and contouring (photo 14). In just one year, CHPRC demolished all three of the 9,707-square-foot storage buildings and their below-grade basins, removing approximately 29,000 square feet of radioactively contaminated building space from the 200 North Area of the Hanford Site.



#### Waste Sites

Recent progress in remediating the outer zone waste sites includes (listed by operable unit or site):

- 200-MG-1
  - o 600-37: Sampling activities continued.
  - o 600-40: Verification samples were taken and the report is being prepared.
  - o 600-262: Confirmatory sampling is complete and the data report indicates the waste site can be down-posted from an Underground Radioactive Material Area. Additionally, the data indicates that no additional retrieve, treat, and disposal (RTD) is required, therefore closure documentation is being prepared.
  - o 600-275: Mobilization for RTD is in process.
  - o 600-281: The cultural report and sampling instructions was completed, and the sampling was performed this week.
  - o Planning for RTD continued for the following waste sites:
    - 200-W-33
    - **600-218**
    - **600-36**
    - **600-38.**
- 200-CW-3
  - o 216-N-1: Closure documentation is being prepared for DOE and Regulatory approval.
  - o 216-N-4: Remediation continued with three super dump trucks having delivered approximately 22,500 tons of contaminated soil to ERDF.
- BC Control Area
  - o Remediation continued with seven super dump trucks having delivered approximately 103,000 tons of contaminated soil to ERDF. For Zone A, approximately 25.5 acres have been excavated and surveyed; for Zone B, 850 acres have been surveyed and the hazards were down-posted from a radiologically contaminated area. Surveying in Zone B was temporarily stopped due to concerns involving migratory birds.





Excavators remove soil from Zone A of the BC Control Area while a water truck sprays water to control loose soil. As of May 7, 2010, CHPRC has used Recovery Act funding to remove more than 100,000 tons of contaminated soil from the BC Control Area since the fall of 2009.

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

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

#### Facility D&D

Demolition of the 183.2KW Sedimentation Basin floor and the 183.3KW Filter Basin continued. The 183.5KW Lime Feeder Building has been demolished and the debris is being loaded for transport to ERDF. The Lime Feeder Building also discharged lime to the 183.4KW Clearwell to treat water before it was fed to the reactor facilities, similar to the 183.6KW Lime Feeder Building that was demolished in early April 2010.





The 183.5KW Lime Feeder Building during demolition. Similar to the 183.6KW Lime Feeder Building, this structure also discharged lime to the 183.4KW Clearwell to treat water before it was fed to the reactor facilities. With Recovery Act funding, CHPRC demolished both facilities - totaling more than 3,550 square feet.

Approximately 150 feet of interior ducting has been installed in the 105KW Fuel Storage Basin facility as part of the 105KW heating, ventilation, and cooling system upgrade. Scaffold is being constructed for upcoming ducting installation.



Photo 17

A section of ducting that was installed in the 105KW Fuel Storage Basin facility as part of CHPRC's effort to upgrade to the heating, ventilation, and cooling system to improve working conditions in the facility.

Planning documents received from the contractor for the upcoming explosive demolition of the 116KE Reactor Exhaust Stack are being reviewed. Asbestos abatement continued in the 1706KE and 1706KER substructures in preparation for demolition.

Preliminary design activities and document preparation for disposition of the 105KE Reactor continued. Core boring activities are in progress at the first of four locations. Approximately 57 inches of a planned 77.5 inches of boring at this location have been completed. Core boring is being performed to collect samples from the concrete biological shield, cast iron thermal shield, and graphite blocks and will provide information regarding the radiological and physical conditions of the reactor. Asbestos abatement preparations and hazardous material removal continued in the 105KE Reactor building as well.

Glycol removal from the 100K Area systems is continuing. Approximately 22,000 gallons have been removed to date.





CHPRC is performing core boring at the 105KE Reactor to collect samples from the concrete biological shield, cast iron thermal shield, and graphite blocks and gather information regarding the radiological and physical conditions of the reactor.

#### *Infrastructure Utilities Upgrade Project*

Isolation of the 100K Area utilities continued. Trench excavation, pipe installation, and backfill began for the import water line. Nearly 8,000 feet of pipe has been installed. Pipe casing was installed at two road crossings and one railroad crossing. Pipe is being located along the pipe route.

Approximately 2,500 feet of fire water pipe has been installed with backfilling and compaction completed for about 2,350 feet of pipe for the 100K fire water and potable water system. Asphalt saw cutting was completed and pot hole excavation began near the 105KW facility in preparation for installation of fire and potable water pipe. Contractor bids are being obtained for the installation of fire water and potable water line for the remainder of the 100K Area.

At the site of the future 100K Area Water Treatment Facility, a geotechnical survey of soils under the foundation locations indicated the top four feet of soil will need to be removed in order to reach the undisturbed native soil. The construction contractor is removing the undesirable soils and replacing them with structural fill. A sump pit was excavated and compacted and concrete forms construction began. Building and tank designs were submitted and approved; off-site fabrication was initiated. Fabrication of the fire pump and the microfiltration unit for the Water Treatment Facility is ongoing.



Trench excavation for the A9 Switchyard Site upgrade continued. Approximately 1,400 feet of trench has been excavated and 6,000 feet of conduit installed. Fourteen of 18 utility vaults have been installed.



Photo 19

Excavation and soil removal is in progress at the construction site for the 100K Area Water Treatment Facility. The facility will provide potable water for the 100K Area so that CHPRC can deactivate and demolish the existing treatment facilities.

#### Waste Sites

Recent progress in remediation of the 100K Area waste sites includes (listed by waste site):

- Closure documentation is being developed 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)
- 100-K-47 (Process Sewer) Approximately 10,300 tons of contaminated soil have been removed and delivered to ERDF.
- 100-K-56 (Reactor Cooling Water Pipelines) Approximately 7,900 tons of contaminated soil



- have been removed and delivered to ERDF.
- 100-K-63 (West Floodplain) Planning continued for the remediation of the waste site.
- 100-K-68 (Pump Gallery and Catch Tank) Approximately 2,900 tons of contaminated soil have been removed and delivered to ERDF.
- 100-K-71 (Collection box) Remediation of the waste site continued.
- 100-K-102 (French Drains and Mercury-Stained Soil near 183KW Sedimentation Basin) -Approximately 7,400 tons of contaminated soil have been removed and delivered to ERDF.
- 116-KE-3 (Storage Basin French Drain) Approximately 2,800 tons of contaminated soil have been removed and delivered to ERDF.
- 120-KW-1 (183-KW Filter Water Facility Dry Well) Remediation continued with the removal of contaminated soils and demolition of structures down to six feet. The contaminated soils are placed in staging piles to determine the treatment path for the chromium contamination.



An excavator prepares to remove soil from the 100-K-102 waste site, which consists of French drains and mercurystained soil near the 183KW Sedimentation Basin (left). To date, CHPRC has removed 7,400 tons of contaminated soil from the waste site.



#### **UPCOMING EVENTS**

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

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

- Remove three glove boxes/hoods from room 136 and transfer them to room 192D for NDA.
- Complete equipment removal from six glove boxes/hoods in room 139, and initiate isolation, cleanout, and removal of five glove boxes/hoods in rooms 141, 180 and 188.
- Enlarge doorway 638 and transfer glove box HC-60 to waste operations for NDA.
- Remove various structures around glove box HC-230C-3, apply contamination fixative within the box, remove it from building ventilation, and transfer the glove box to Solid Waste Operations.
- Separate glove box 400 from glove box 200 and remove it from building ventilation.
- Complete process equipment removal from glove boxes HA-28 and HA-46; restart work on glove boxes 227-S and 227-T; and begin cleanout of glove boxes HC-230C-4 and C-5.
- Initiate removal of the process vacuum system piping from the 234-5Z and 291-Z buildings.
- Apply contamination fixative inside the 636 glove box, isolate it from building ventilation, enlarge the exit doorway, and remove it from the 2736-ZB building.
- Continue removal of smaller process equipment form the five glove boxes in room 642, and install a new glove box panel and load-out port for removal of larger and heavier equipment.
- Complete updated NDA measurements of the 2736-ZB ventilation ducting and filter housings to support implementation of the D&D DSA.
- Complete the removal of combustibles from the 242-Z tank room and begin applying contamination fixative in the control room.

# RL-0013 Solid Waste Stabilization & Disposition

RL-0013C:R1.1: MLLW Treatment

- Planned shipment of one box (6.4 m<sup>3</sup>) of MLLW debris sent from CWC to PFNW.
- Planned shipment of one box (11.7 m³) of MLLW debris and sludge sent from CWC to Energy Solutions in Clive, UT (ES-Clive).
- Planned shipment of one box (2.7 m³) of MLLW debris sent from CWC to ES-Clive.
- Planned shipment of 13 drums (2.4 m³) of LLW sent from CWC to PFNW.

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

- TRU Retrieval
  - o Burial Grounds 3A Trench 17:
    - Prepare for the Hazard Review Board meeting on the work packages for repackaging Boxes 80 and 82.
    - Construct shoring box and start excavation in support of Box 3 removal.
    - Continue planning for the start-up of removal activities in Trench 8.
    - Mock-up industrial hygiene instrumentation at the Simulation Test Site trench in support of Trench 17 activities.
  - o Burial Grounds 4B Trench 11:
    - Continue planning for the Phase II Recovery Plan for resuming Burial Grounds 4B, Trench 11 removal activities.
    - Complete the final draft of the Trench 11 Recovery Plan and supporting documents for moving the boundaries inward.
    - Complete full mock-up of SUMMA canister deployment and collection entries with all potential entry team members.



- o Continue Mobile Decontamination Unit set-up/start-up.
- o Complete the removal of the tent and ecology blocks in the 4C Process Area.
- Alpha Caisson Retrieval
  - o Issue preliminary Conceptual Safety Design Report on May 13 to DOE for review.
  - o Issue Project BCR by May 13.
  - o Complete Acquisition Plans by May 30.
  - o Award contract for remote retrieval system mock-up demonstration/validation on May 31.
- TRU Repack
  - o Five planned TRUPACT-II shipments to the Waste Isolation Pilot Plant.

#### 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 Facility.
- Continue decommissioning wells across the site.
- Continue well installation at M-24, 100-HR-3, 100-NR-2 and 200-ZP-1.
- Continue planning for well installations at 100-KR-4, 100-HR-3, 100-BC-5, and 300-FF-5.

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

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

- Receive delivery of the remaining D&D heavy equipment being procured.
- Complete demolition preparations and begin demolition of the U Plant ancillary facilities.
- Continue relocating equipment from the U Canyon deck into the process cells.
- Continue demolition preparations (i.e., cold and dark activities) for the 284-E Powerhouse.
- 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 removing debris sites throughout the ALE Reserve.
- Continue demolition of the upper ALE facilities.
- Continue cold and dark isolation activities of the ridgeline communication structures.
- Continue remediating the BC Control Area, 200-CW-3, and 200-MG-1 waste sites.

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

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

- Continue demolition of the 183KW Sedimentation Basin structures.
- Continue demolition preparation activities for the 115KE, 116KE, 117KE, 1706KE, and 1706KER buildings.
- Continue debris removal from the KW Fuel Storage Basin.
- Continue activities for upgrading the 105KW HVAC 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.

