

# **ARRA** Weekly Report



January 19, 2010 Contract DE-AC06-08RL14788 Modification M047 CHPRC1001-05

# Contents

DVERVIEW	3
ACCOMPLISHMENTS	
RL-0011 Nuclear Materials Stabilization & Disposition	
RL-0011.R1: Plutonium Finishing Plant D&D	Z
RL-0013 Solid Waste Stabilization & Disposition	7
RL-0013C:R1.1: MLLW Treatment	7
RL-0013C:R1.2: TRU Waste	11
RL-0030 Soil & Groundwater Remediation, Groundwater/Vadose Zone	13
RL-0030.R1: Central Plateau Soil & Groundwater	13
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	17
RL-0041 Nuclear Facility D&D – River Corridor Closure Project	22
RL-0041.R1.1: 100 K Area Remediation	22
JPCOMING EVENTS	24
RL-0011 Nuclear Materials Stabilization & Disposition	24
RL-0011.R1: Plutonium Finishing Plant D&D	24
RL-0013 Solid Waste Stabilization & Disposition	24
RL-0013C:R1.1: MLLW Treatment	24
RL-0013C:R1.2: TRU Waste	24
RL-0030 Soil & Groundwater Remediation, Groundwater/Vadose Zone	25
RL-0030.R1: Central Plateau Soil & Groundwater	25
RL-0040 Nuclear Facility D&D – Remainder of Hanford	25
RL-0040.R1.1: U Plant/Other D&D	25
RL-0040.R1.2: Outer Zone D&D/Waste Sites	25
RL-0041 Nuclear Facility D&D – River Corridor Closure Project	25
RL-0041.R1.1: 100 K Area Remediation	25



# **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 that will help prepare the Plutonium Finishing Plant (PFP) for demolition to slab-on-grade three years ahead of the Tri-Party Agreement Milestone of September 2016. The highest priority scope includes removing over 170 glove boxes/laboratory hoods and other highly contaminated equipment from the 234-5Z building, the largest facility at Hanford for plutonium production and processing.

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 and drill 344 wells that will be used for monitoring, extracting, and remediating groundwater.

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 provide access to waste sites located underneath.

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 49 wastes 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

D&D field work teams continue to accelerate cleanout and removal of highly contaminated plutonium processing and laboratory equipment from throughout PFP's largest facility, the 234-5Z building:

- *Standards Laboratory* Surface sampling was completed and new control points were established for the beryllium controlled area in rooms 221C and 221D.
- Analytical Laboratory The last of five glove boxes in room 146 was isolated from building
  ventilation, removed, and loaded into a container for future disposal at the Environmental
  Restoration Disposal Facility (ERDF). This brings the number of glove boxes and hoods
  removed from 234-5Z building with support of Recovery Act funds to 38. Crews are nearing
  completion of size reduction and removal of laboratory equipment connected to and within three
  glove boxes in room 136.
- Plutonium processing areas Remaining decontamination waste was removed from glove box HC-230C-3. Surface Contaminated Object surveys were then conducted to determine whether extensive chemical decontamination efforts were successful in reducing residual radioactivity to meet LLW criteria. Chemical decontamination was initiated on glove box HC-60. Size reduction and removal of process equipment from within glove boxes HA-19B1 and B2 continued, as did preparations for isolation and cleanout of glove boxes HC-227S and HA-46. A large containment was designed and the work package released for beginning work on glove boxes in the former Radioactive Acid Digestion Test Unit area.

Elsewhere in the 234-5Z building, safety showers were disconnected and removed from rooms 188 and 228A. A crew also began removing deactivated steam piping. A contract was placed for procurement of large chillers that will be used beginning next summer to cool radiologically controlled areas of the 234-5Z, 236-Z, and 242-Z buildings. The upgrade is in response to poor performance from the aging heating and cooling systems that impacted productivity of D&D crews during last summer's high temperatures.

The Solid Waste Organization staff loaded 38 contaminated DOT-6M and -6L shipping containers into a container for volume reduction at Perma-Fix Northwest (PFNW) prior to disposal at ERDF. The containers were previously received from other DOE sites and stored for years in the PFP yard. Similar to the disposition of glove boxes, removing these excess containers is helping CHPRC clean out the PFP facilities and clear the way for demolition activities in the future.

Insulators removed asbestos from nearly 260 additional feet of piping and ductwork, bringing the total to nearly 6,900 feet of insulation removed to date with Recovery Act funds. Preparations continued toward initiating the removal of more than 5,000 feet of process vacuum lines throughout the facility, expected to begin in early February.

During a media visit to the Hanford Site on Jan. 13, a reporter from the Cable News Network (CNN) filmed Recovery Act work at PFP and various other projects.





Workers perform decontamination of the interior of a glove box in room 230C of the 234-5Z building at the Plutonium Finishing Plant. Glove boxes are decontaminated to meet low-level waste criteria whenever possible, which allows for on-site disposal rather than size reduction and packaging for shipment to DOE's Waste Isolation Pilot Plant in New Mexico.



Photo 2

Crews team up to remove the last of five glove boxes from room 146 in the Analytical Laboratory at the Plutonium Finishing Plant. Removing this glove box brings the total number of glove boxes and laboratory hoods removed by CHPRC with Recovery Act funding to 38.



Photo 3

Workers load contaminated shipping containers for transfer to Perma-Fix Northwest where they will undergo volume reduction prior to disposal. The containers were previously received from other Department of Energy sites and stored at the Plutonium Finishing Plant complex. Removing these containers is part of CHPRC's effort to accelerate cleanout of excess equipment and prepare the complex for demolition ahead of schedule.

# RL-0013 Solid Waste Stabilization & Disposition

RI -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:

- 738 m³ have been shipped to date including:
  - 296 m<sup>3</sup> of LLW that have been treated and disposed.
- o 442 m<sup>3</sup> at off-site treatment facilities awaiting processing. Treatment is scheduled for FY10. Three shipments of waste were sent out for treatment this week. Sixteen drums (4.8 m<sup>3</sup>) of MLLW, Toxic Substances and Control Act (TSCA) MLLW, and TSCA LLW solids were shipped from the Central Waste Complex (CWC) to Perma-Fix East on Jan. 12. A similar shipment was sent from the Waste Receiving and Processing Facility (WRAP) on the same day. Six drums (1.2 m³) of MLLW and TSCA MLLW were shipped to Perma-Fix East. Both of these shipments will be thermally treated through the vacuum thermal desorption process and the resulting condensate will be incinerated to thermally destroy the polychlorinated biphenyls and other organics. Another shipment was sent from WRAP on Jan. 14. Twenty drums (6.3 m<sup>3</sup>) of MLLW debris, formerly classified as TRU waste, were shipped to PFNW and will be non-thermally treated and grouted or encased in a special concrete.





Two shipments loaded and ready to be sent to Perma-Fix East. One shipment contains 16 drums (4.8 m³) of waste and the other shipment contains six drums (1.2 m³) of waste all of which will be thermally treated prior to disposal.



Twenty drums (6.3 m³) of mixed low-level waste debris is ready for shipment to Perma-Fix Northwest where it will be non-thermally treated and grouted or encased in a special concrete, a process called macro encapsulation.



Photo 6

A shipment of mixed-low level waste debris is inspected prior to leaving for treatment at Perma-Fix Northwest. The waste packages are inspected to ensure they are identified and reported on the manifest, appropriately loaded into the shipping vehicle, and correctly marked and labeled.

#### Environmental Restoration Disposal Facility "Self Perform"

Contractors performed trenching and installation of the underground electrical conduit that will provide building power, vehicle hot starts, and yard lighting for the new Container Maintenance Facility. The building foundation concrete was tested and shown to meet strength requirements allowing the contractor to proceed with erecting the building. The construction contractor turned over the south side container storage area to operations to begin staging new containers. The Operations group moved 144 containers from a temporary area to the new area.





Workers install underground conduit at the Container Maintenance Facility. Once the conduit is installed, the trenches will be backfilled. The conduit will provide electrical power to the building, which is being constructed with Recovery Act funds to serve as the central storage and maintenance facility for CHPRC's roll-on/roll-off containers.

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

Of the 2,500 m<sup>3</sup> of suspect TRU waste planned for retrieval under the Recovery Act:

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

Removal activities continued in 3A Trench 17 where workers continued removing the lid off Box 82, which is now approximately 90 percent complete. Low-level waste from Box 82 was packaged and



placed into a roll-on/roll-off container for disposal. The excavation of the two middle sections beneath Box 3 is complete, allowing for the placement of the base lift plates in preparation for removing the box from the trench. SUMMA canister sampling was also completed on the final four risers in 3A Trench 8. CNN filmed portions of the lid removal and other retrieval activities.



Photo 8

Radiological control technicians perform radiological surveys after cutting into the lid of Box 82, which is located in the 3A burial grounds on the Hanford Site. Boxes in the burial ground were built and buried in the 1970s and some, like Box 82, are damaged and require special care and equipment as they are removed from the trench.

#### Alpha Caisson Retrieval Project

The Alpha Caisson Retrieval Project Management Group presented their project status to the Defense Nuclear Safety Board on Jan. 13 and the CHPRC staff completed review of the draft Conceptual Design Report (CDR). Comments on the CDR were provided to ARES and AREVA for resolution. ARES is developing responses to the CDR comments and incorporating them into their CDR text for the Waste Retrieval System and the Waste Processing System.

#### TRU Project Drum Repackaging

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

- 609 drums (126.7 m<sup>3</sup>) were repackaged.
- 910 drums (189 m³) have been quick-scanned to date.
- Repack instructions (corrective actions) for 1,140 drums (237.1 m³) have been developed.



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

RL-0030.R1: Central Plateau Soil & Groundwater

Recent drilling progress includes (listed by operable unit):

- 100-NR-2 Drilling on 171 wells to expand the apatite barrier continued with 64 wells in process, 68 wells drilled to total depth, and 25 wells constructed and developed. Development of the shallow wells will continue when the river elevation is sufficient.
- 100-HR-3 In the D Area, a total of 14 wells will be drilled to support the new DX Groundwater Treatment Facility. To date, 12 wells are in process with nine of the wells drilled to total depth and eight of the 11 wells constructed and developed. The remaining well locations are being prepared for drilling activities.
- 200-BP-5 Drilling on three wells continued with current depths of 326, 361, and 120 feet.
- 200-ZP-1 Expansion Drilling operations continued on 17 wells in support of the new 200 West Groundwater Treatment Facility with eight wells in process. Six of the wells are drilled to total depth and three have been constructed and developed.
- 100-BC-5 Drilling continued on three of the four planned wells. To date, two wells have been drilled to total depth and the other two are currently in process.



Drilling continues on one of three wells being installed in the 200-BP-5 operable unit. Altogether with Recovery Act funds, CHPRC plans to drill over 300 wells throughout the Hanford Site to contain the potential migration of contamination plumes and accelerate soil remediation.





Photo 10
A geologist logs a sample retrieved from a well in the 200-BP-5 operable unit. Samples are taken at drill sites to identify or measure contamination in the soil.



A geologist, driller, and nuclear chemical operator take a water sample to determine the characteristics of the groundwater within the newly drilled monitoring well at the 100-BC-5 site. The monitoring well will be used to track the progress of the remedial actions at the 100-BC-5 site over time. CHPRC is using Recovery Act funds to drill a total of

four wells at the site to monitor groundwater.

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

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

U Canyon

Equipment size reduction and placement into process cells continued. To date eight cells have been



completed with 55 percent of the large equipment placed. Five bids on the grout conveyance process were received and are being evaluated. Work on re-grading the access road to the railroad tunnel to support future transfers in and out of the canyon continued. Modifications are being made to the gamma scan camera to make it compatible with systems in the canyon. Disposition of the D-10 tank in Cell 30 is being evaluated and a plan for disposing of chemicals in the canyon is being prepared.

#### **U Plant Ancillary Facilities**

In parallel, asbestos abatement work continued at the U Plant Ancillary facilities, 224-U and 224-UA, to prepare them for demolition later this fiscal year. In 224-UA, work is currently concentrated on asbestos removal from the calciner area. At 224-U, asbestos abatement glove bag installation and asbestos removal continued.

#### 200 East Core Industrial Buildings

Walk downs and engineering continued to support work planning for cold and dark isolation of the nine buildings to be demolished in the 200 East core industrial area during FY 2010. Mobilization of power supplies and asbestos abatement equipment for the 272E building is ongoing. Walk downs and sampling for other industrial and health hazards are ongoing in the 284E Powerhouse.

### 209-E Criticality Mass Laboratory

Contracts are being placed for Mission Support Alliance support, burial boxes are being ordered, and personnel are being prepared to enter the facility to perform detailed work schedule planning. Preparations continue for cleaning out the 209-E building. The design review for the confinement structure and development of the draft Startup Notification Scoring documentation are in progress.

#### Heavy Equipment Procurements

Receipt of the heavy equipment from the Yucca Mountain site and an additional 35 pieces of heavy equipment is complete. Fabrication continues on six of the remaining eight items of heavy equipment being procured. Delivery is expected to be complete in March 2010. The remaining two pieces of equipment are currently in specification preparation.





Photo 12

The interior of Cell 13 in the U Canyon deck. The cell is loaded with equipment previously located on the canyon deck. The equipment will be grouted into place and left for long-term disposal.

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

## Facility D&D

Environmental media samples were taken at the sites of the former 200 North Area buildings (212-N, -P, and -R), which were demolished in 2009 with Recovery Act funding. Backfilling and re-vegetation plans will be developed in accordance with the sample results.

Demolition preparation and asbestos abatement activities are complete for structures on the lower Arid Lands Ecology (ALE) Reserve and demolition is expected to begin next week. Cleanup of the 168 debris sites throughout the ALE Reserve is ongoing. The debris sites are divided into four classes in accordance with the Supplemental Cultural Resources Review requirements. Cold and dark isolation activities of the structures on upper ALE are ongoing.





Sampling is under way at the sites of the former 212-NPR interim fuel storage buildings. With the buildings now removed, CHPRC is sampling the sites to determine requirements for backfilling and re-vegetating the site.



Workers remove a debris site on the Arid Lands Ecology Reserve. Debris sites are located throughout the reserve and can include a range of materials. This site consisted of fence and wire. With Recovery Act funding, CHPRC plans to remove 168 debris sites.

#### Waste Sites

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

- 200-MG-1 Preparations and field remediation continued on waste sites 600-218, 600-36, 600-38, 600-275, and 600-40. The development and processing of the Response Action Completion Reports (RACR) for closing waste sites 200-E-110, 600-21, and 600-51 continued.
- 200-CW-3 Remediation continued at the 216-N-1 waste site. Approximately 1,500 tons of contaminated soil have been shipped to ERDF. Remediation was initiated at the 216-N-4 waste site with approximately 740 tons of contaminated soil shipped to ERDF. Super dump trucks are being utilized to transport the contaminated soil to ERDF. An additional truck was recently procured and put to service at the site last week. Both 216-N-1 and 216-N-4 are sites that were previously contaminated due to releases from the former 212-NPR interim fuel storage buildings.
- BC Control Area Remediation of the BC Control Area continued with approximately 21,700 tons of contaminated soil having been shipped to ERDF. An additional super dump truck is now on site and will be utilized in the BC Control Area.





A recently procured super dump truck receives its first scoop of soil from the 216-N-4 waste site in the 200 North Area of the Hanford Site. The white placard indicates the truck was new to the site and had not yet received radioactive waste.



The super dump truck, now filled with contaminated soil from the 216-N-4 waste site and marked with a radioactive trefoil, departs for the Environmental Restoration Disposal Facility. Approximately 740 tons of contaminated soil have been shipped from the 216-N-4 waste site.



Photo 1

Two super dump trucks are in service to support remediation of waste sites in the 200 North Area. The white truck is receiving soil from the 216-N-4 waste site as a recently procured truck in the distance is surveyed before leaving the waste site. CHPRC procured the trucks with Recovery Act funds as part of the Environmental Restoration Disposal Facility "Self Perform" project to accelerate safe and efficient transport of CHPRC's increasing waste streams.

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

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

#### Facility D&D

Roughly 60 percent of the internal structures and fixtures in the 183.2 KW Sedimentation Basin have been demolished or removed. CNN filmed demolition within the basin and toured the 183KW facilities during the media visit on Jan. 13.

Cold and dark conditions were achieved on the 1724KB building on Jan. 11. Asbestos abatement took place in the 115KE building and will continue for several weeks. Characterization sampling of filters in the 117KE building was performed and analysis results will be used to determine worker protection controls required during demolition. Electrical circuit tracing is ongoing to complete the isolation of the 105KE Reactor building. Evaluation of the 105KE circuitry indicates that an electrical outage will be necessary to complete the electrical isolation and will complete the cold and dark activities for the 105KE, 116KE, and 117KE buildings. The outage is scheduled for Jan. 22.



Asbestos abatement and removal in the 183.7 KW Pipe Tunnel continued and hot tapping was performed to allow for the removal of residual liquids from sections of the pipe. Demolition preparations for the 183.1 KW Headhouse continued with asbestos abatement and air gapping of pipes. Asbestos removal preparations are ongoing for the below-grade structures of the 1706KE building. Asbestos removal is required before transitioning the footprint to the Soil and Groundwater Remediation team for final waste site disposition.

Removal and packaging of debris from the K West basin continued with 16 debris units removed during this reporting period.

Preliminary Design activities for the disposition of the 105KE Reactor core continued. The reactor graphite tumble test to obtain dusting properties of the reactor graphite is complete. The test report is being independently reviewed. Mock-ups of glove bags needed for the next phase of sampling have been built with dry-runs scheduled for the week of Jan. 18.



Photo 18

A worker is positioned to begin drilling through the wall of a pipe containing liquids in the 183.7 KW Pipe Tunnel. The drill is aligned through the center of a valve recently attached to the pipe. Upon breaking through the pipe wall, the drill is quickly removed and the valve closed. This allows controlled draining of the contained liquids. The pipe tunnel is part of the 183KW Sedimentation Complex that is being demolished with support from Recovery Act funding.



#### Waste Sites

Recent progress in remediation at the 100 K Area waste sites includes (listed by operable unit or site):

- *UPR-100-K-1* The configuration of the work site was adjusted to provide access for radiological control technicians to conduct dose rate sampling of additional areas near the basin walls and to take soil samples at the bottom of the excavation. Data from the sampling is being obtained.
- 100-K-56, 100-K-3, and 100-K-47 Pipelines Work continued on removing overburden to truncate lines that potentially feed the outfall from the 105KE area. Removing the overburden will continue and ultimately the pipelines will be removed.
- 100-K-63 and 100-K-64 Soil samples were obtained and preliminary sample results have been returned for the 100-K-63 waste site, but the results have not been officially released to date. Samples for 100-K-64 were shipped to the laboratory for analysis.

## **UPCOMING EVENTS**

# RL-0011 Nuclear Materials Stabilization & Disposition

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

- Complete process equipment removal from three glove boxes in room 136 and initiate chemical decontamination.
- Complete process equipment removal on glove boxes HC-230C-2, HA-19B1, and HA-19B2.
- Initiate process equipment removal from glove boxes HA-46 and HC-227S.
- Reassess the radiological status of and determine a disposition path for three additional glove boxes previously removed from room 137 of the Analytical Laboratory.
- Continue deactivation of excess safety showers and lights in the 234-5Z building.
- Complete mechanical isolation and removal of the storage tank on the 2731-ZA nitrogen generator facility.

# RL-0013 Solid Waste Stabilization & Disposition

RL-0013C:R1.1: MLLW Treatment

- Planned shipment of 18 m³ (86 drums) of LLW debris on Jan. 19 from the CWC to PFNW.
- Planned shipment of 5.2 m³ (21 drums) of MLLW debris, formerly classified as TRU waste, on Jan. 20 from WRAP to PFNW.
- ERDF "Self Perform":
  - o Receive two new roll-on/roll-off trucks.
  - o Support generators with waste movements.
  - o Container Maintenance Facility:
    - Backfill conduit-run trenches.
    - Start preparing the area for outdoor concrete pads.
    - Install lighting on poles (prior to installation).
    - Shake out building material.
    - Begin erecting the building.

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

- Complete ground penetrating radar scan of 3A Trench 8 to identify trench boundaries and location of buried waste containers.
- Prepare site at 4C and receive Mobile Radioactive Decontamination Unit trailer.
- Remove old 4B/4C area restroom trailer and prepare the site for replacement restroom trailer.



- 3A Trench 17:
  - o Develop critical lift plans to remove Boxes 2 and 12.
  - o Prepare work package for removal of suspect TRU waste from Boxes 80 and 82.
- Install new mask station CONEX trailer.
- Alpha Caisson Retrieval:
  - o Resolve and incorporate review comments on the CDR by Jan. 26.
  - o Finalize cost and schedule rollups by Jan. 28.
  - o Finalize CDR and release documents by Jan. 31.

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

RL-0030.R1: Central Plateau Soil & Groundwater

- Continue construction of the DX Pump-and-Treat Facility.
- Continue drilling at 200-ZP-1, 100-HR-3-H, 100-HR-3-D, 100-BC-5, and 100-NR-2.

# 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.
- Continue asbestos abatement and demolition preparations for U Plant ancillary facilities.
- Continue relocation of equipment on the canyon deck into the cells.
- Complete radiological surveys and initiate cold and dark isolation of the nine 200 East Area core industrial complex buildings.
- Complete detailed planning for cleanout of the 209-E building.
- Order the confinement structures for the 209-E building.

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

- Backfill the former 212-NPR building sites and re-vegetate the areas.
- Begin demolition of the lower ALE facilities.
- Continue cold and dark isolations of upper ALE facilities.
- Continue remediation at the BC Control Area and the 200-CW-3 waste sites.

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

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

- Continue demolition of the 183.2 KW Sedimentation Basin.
- Initiate demolition of the 183.1 KW Headhouse.
- Continue Preliminary Design activities for the disposition of the 105KE Reactor.
- Perform the first formal KE reactor characterization efforts.
- Finalize the reactor graphite tumble test report.
- Continue tooling and debris removal from the KW basin.
- Continue remediating soils beneath the former K East Fuel Storage Basin and the pipeline waste sites (100-K-47, 100-K-56, and 100-K-3).

