

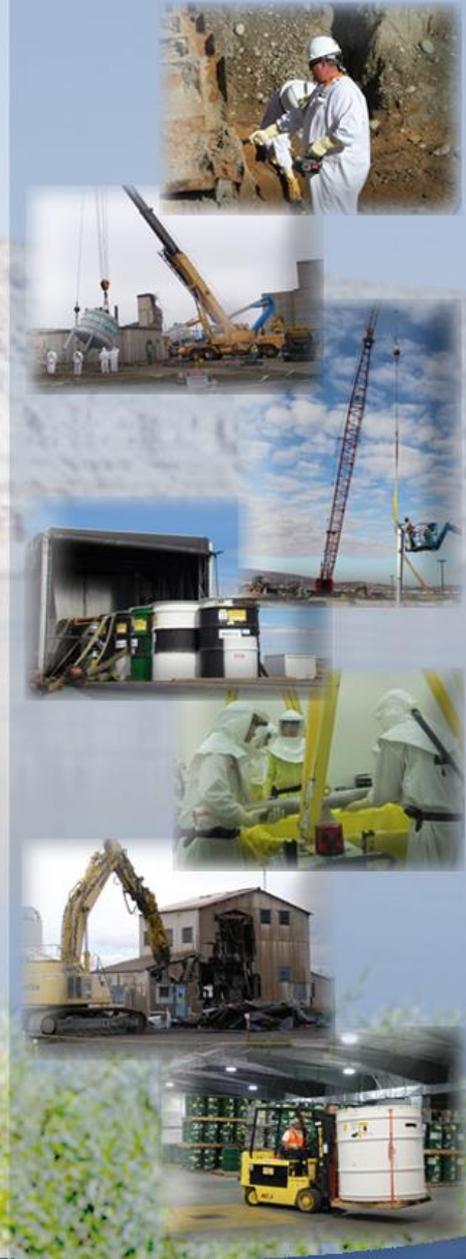


# Cleanup Progress Update

*Hanford Advisory Board*

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Deputy Manager,  
Department of Energy Richland Operations Office*

*February 2015*

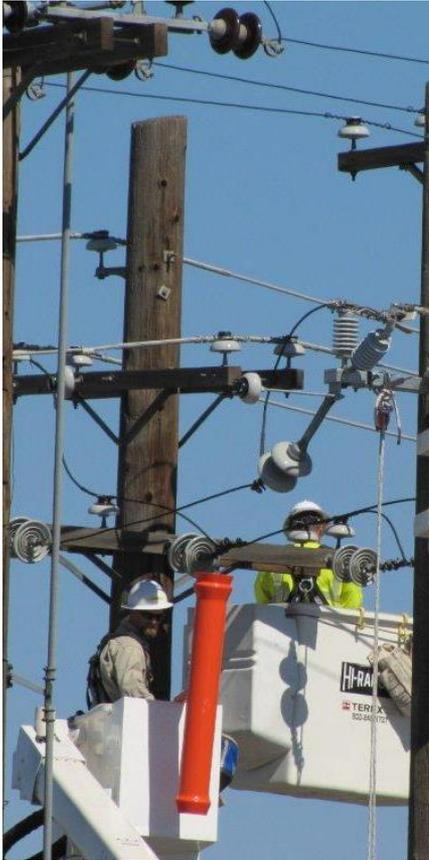


# Budget

## Richland Operations Office FY 2015 Funding Marks by Control Point

PBS	PBS Title	FY 2014 Omnibus (Enacted)	FY 2015 President's Budget	FY 2015 Omnibus Allocation	FY 2016 President's Budget
RL-0011	NM Stabilization and Disposition - PFP	142,670	168,228	137,130	148,661
RL-0012	SNF Stabilization and Disposition	98,369	76,777	67,746	81,192
RL-0012	15-D-401 Containerized Sludge Line Item		26,290	46,055	77,016
RL-0013	Solid Waste Stabilization and Disposition - 200 Area	130,126	112,371	107,651	150,691
RL-0030	Soil and Water Remediation - Groundwater/Vadose Zone	141,500	116,916	184,929	174,619
<b>Subtotal</b>	<b>Central Plateau Remediation</b>	<b>512,665</b>	<b>500,582</b>	<b>543,511</b>	<b>632,179</b>
RL-0040	Nuclear Facility D&D - Remainder of Hanford	70,992	65,922	65,922	88,874
RL-0041	Nuclear Facility D&D - River Corridor Closure Project	337,642	266,866	311,866	108,083
<b>Subtotal</b>	<b>River Corridor and Other Cleanup Operations</b>	<b>408,634</b>	<b>332,788</b>	<b>377,788</b>	<b>196,957</b>
RL-0020	Safeguards and Security	69,078	63,668	63,668	67,601
RL-0042	Nuclear Facility D&D - Fast Flux Test Facility Project	2,542	2,562	2,562	2,562
RL-0100	Richland Community and Regulatory Support	19,701	14,701	19,701	14,701
RL-TD-0100	Technology Development		-		
<b>Total - RL</b>	<b>Richland Field Office Funding Summary</b>	<b>1,012,620</b>	<b>914,301</b>	<b>1,007,230</b>	<b>914,000</b>

# Safety and Health



*Repairing electrical utilities*



*Removing radioactive pipelines in the 300 Area*



*Performing radiological surveys of heavy equipment*



*Removing glove boxes at the Plutonium Finishing Plant*

# Overall Occupational Safety Performance

FY 2015 EM-wide goals: TRC = 1.1; DART = 0.6

December-14							
Project	Work Hours	TRC Rate	DART Rate	FY15 TRC Rate	FY15 DART Rate	FY14 TRC Rate	FY14 DART Rate
PFP	68,051	0.00	0.00	0.96	0.00	1.07	0.27
KBC	12,663	0.00	0.00	0.00	0.00	0.00	0.00
TRU/WO	43,615	0.00	0.00	1.46	0.00	0.36	0.00
GRP	46,177	0.00	0.00	0.00	0.00	0.75	0.00
CHPRC	232,751	0.00	0.00	0.53	0.00	0.57	0.07
MSA	264,407	0.00	0.00	0.48	0.24	1.13	0.66
WCH	150,310	0.00	0.00	0.44	0.00	0.18	0.00
<b>RL TOTAL</b>	<b>647,468</b>	<b>0.00</b>	<b>0.00</b>	<b>0.49</b>	<b>0.10</b>	<b>0.69</b>	<b>0.29</b>

	TRC Rate	DART Rate
Excellent	<= .80	<=0.44
Good	>0.80 -<=1.31	>0.44 - <+0.70
Investigate	>1.31 -<=1.82	>.70 -<=0.95
Define Actions	>1.82	>0.95

# Cleanup Progress – Plutonium Finishing Plant



- Crews remove the face of a glove box in the Americium Recovery Facility

# Cleanup Progress – Plutonium Finishing Plant

- 63 of 81 plant facilities removed or demolished
- 215 of 238 glove boxes removed or cleaned out for removal during demolition
- 173 of 196 pencil tank units removed



*Above, crews remove pencil tank units using a remote crane. Left, a glove box is removed from the ventilation system*

# Groundwater Remediation Progress

- The soil and groundwater remediation project team has treated 560 million gallons of contaminated groundwater in FY2015
- The team has removed:
  - 16,243 kilograms of nitrate (as Nitrogen)
  - 71 kilograms of chromium
  - 737 kilograms of carbon tetrachloride



*Workers perform scheduled maintenance at the 200 West Pump and Treat Facility*

# Soil sampling near K-East Reactor



*Crews have completed earthwork and final drill pads at two borehole sites beneath the former location of the reactor's fuel storage basin*

- Completed earthwork for drilling and sampling of soil and groundwater next to K East Reactor
  - Added ~9,000 cubic yards to cover the old discharge chute and establish a clean and safe working surface
- Contractor awarded field support and laboratory subcontracts

# K-Basin Closure – Annex Construction



*Exterior of the annex*



*Interior of the annex*

# Environmental Restoration Disposal Facility

- Nearly 17 million tons of cleanup waste disposed since ERDF operations began in 1996



- ~400,000 tons of waste disposed to date in FY 2015

# Cleanup Progress – 300 Area

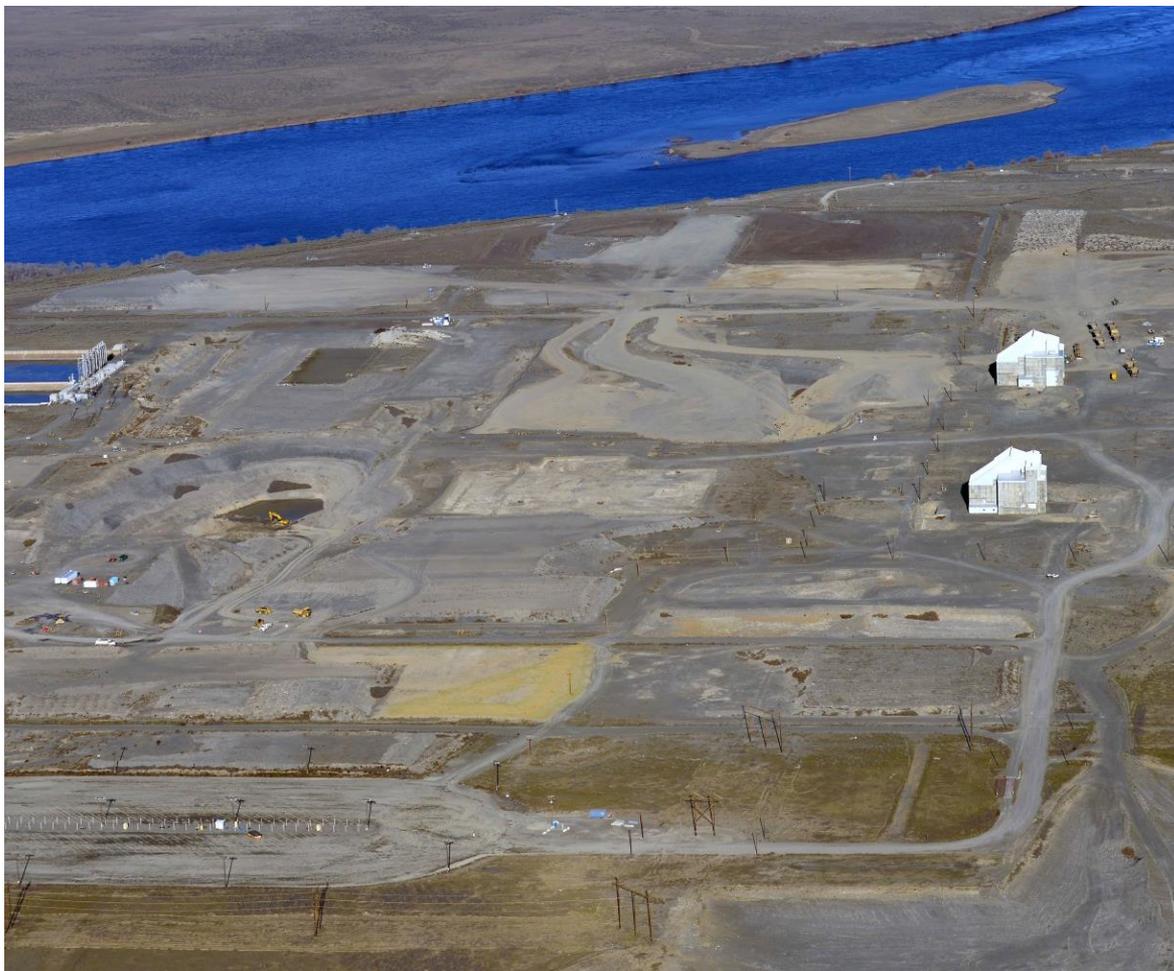


*Site of the former Plutonium Recycle Test Reactor, the largest of six former test reactors in the 300 Area*

- The underground Plutonium Recycle Test Reactor was removed in 2014
- The concrete/steel containment structure (32 feet underground) was removed and processed for disposal
- After sampling, regulators have approved leaving remaining structure in place

# Cleanup Progress – 100-D Area

- Crews backfilled one of two large sites where workers dug 85 feet to remove chromium
- Work is underway to dig additional 10 feet from second deep dig site
- Removing more source term will reduce groundwater treatment costs



*Cleanup of near D and DR reactors is expected will be complete in 2015*

# Cleanup Progress – 100-N Area



# Cleanup Progress – 618-10 Burial Ground

- Remediation of waste trenches to be completed in FY2015
- Progress to date:
  - 240,000 tons of soil loaded out to ERDF
  - 891 drums of excavated, overpacked



*Workers have excavated down 35 feet in some areas to remove drums and contaminated soil. The burial ground is expected to contain about 1,550 drums*



# Richland Operations Office River Corridor Projects

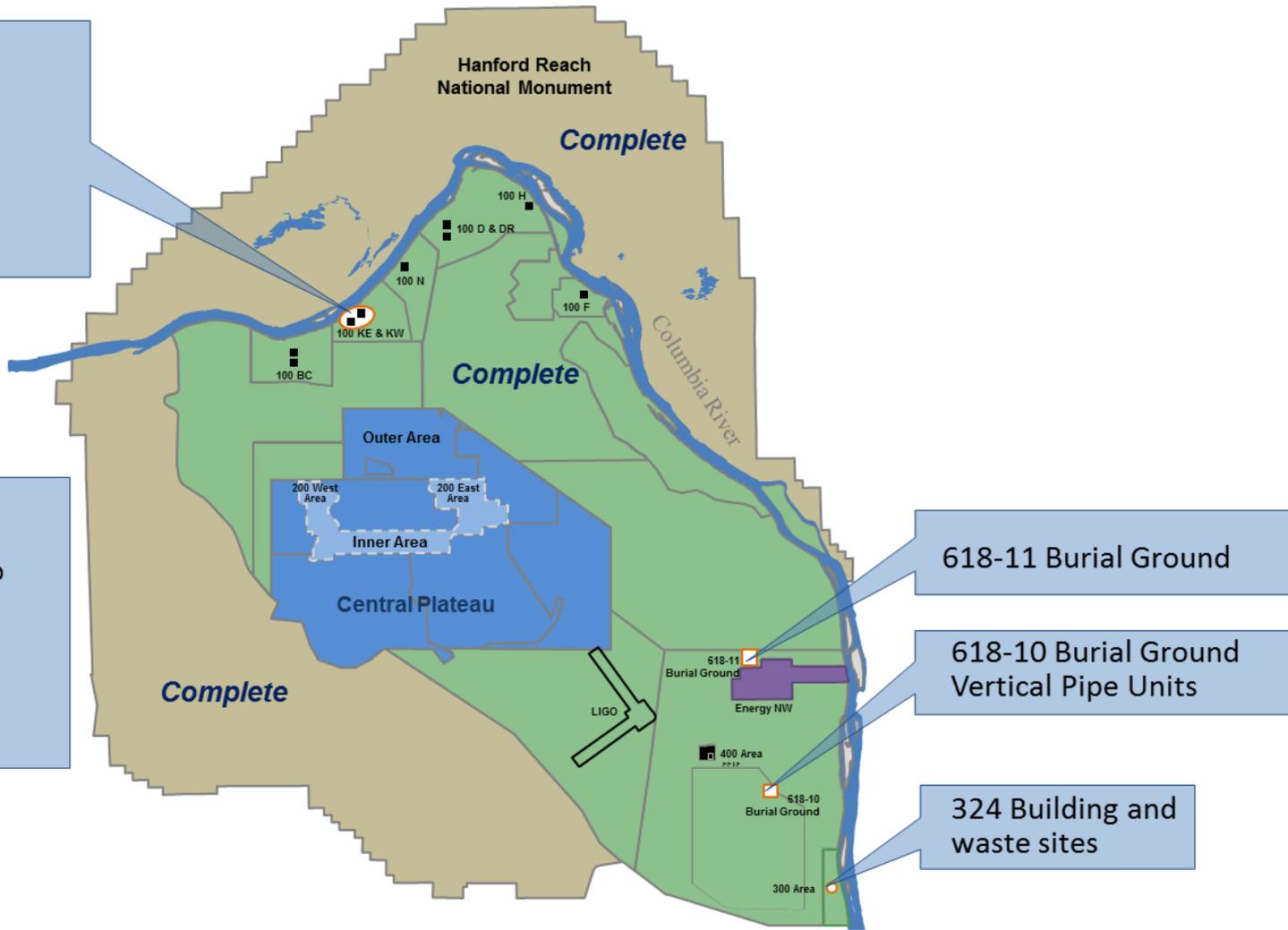
## 100 K-Area

- Transport sludge to Central Plateau for treatment
- Demolish facilities
- Remediate waste sites
- Put reactors in Interim Safe Storage

## Continue groundwater treatment

- Hexavalent chromium pump and treat (D, H and K Areas)
- Strontium apatite barrier (N Area)
- Uranium sequestration (300 Area)

**NOTE: Reactor removal and FFTF D&D Post 2030/2040**



Central Plateau Outer Area Cleanup	Production Reactors & FFTF	To Go Work
River Corridor Cleanup	Energy Northwest	Hanford Reach National Monument

# Manhattan Project National Historical Park



*Visitors at B Reactor*

# Public Outreach/Involvement Activities

## Current/Upcoming Opportunities

- **Public comment period** on proposed upgrades to the Waste Encapsulation Storage Facility, **Dec. 11 to Feb. 20**
- **Public tour season** begins in April. Dates and signup information to be announced soon on [www.hanford.gov](http://www.hanford.gov)
- **Internet survey** – The Tri-Party seek public input to help improve Hanford public involvement activities, [www.hanford.gov](http://www.hanford.gov)



*Members of the Hanford Advisory Board's River and Plateau Committee tour the 300 Area and MASF*

# Find Out More

Go to  
[www.hanford.gov](http://www.hanford.gov)  
to learn about

- Latest news on Hanford cleanup progress
- Upcoming opportunities for input on cleanup decisions
- Upcoming tours
- How to book a speaker
- Hanford newsletters
- Hanford social media sites

