

FY 2009 Congressional Budget Request

Environmental Management

Richland Operations Office

Strengthening the Foundation of Our Future: Investments to Maximize Risk Reduction

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Strengthening the Foundation of Our Future: Investments to Maximize Risk Reduction

Richland Cleanup Priorities

- Maintain Safe & Compliant Facilities and Provide Essential Services
- Execute Hanford Cleanup
 - Clean up groundwater, waste sites, and facilities along the Columbia River Corridor including K East Basin D&D
 - Ship Plutonium offsite
 - Retrieve suspect TRU waste from burial grounds
 - River Corridor Remedial Investigation/Feasibility Study Process Continuation
 - Remediate groundwater in the Central Plateau
 - Certify TRU waste
 - Treat mixed low-level waste
- Meet Community and Regulatory Obligations
- Remediate Central Plateau waste sites
- D&D Central Plateau excess facilities



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	FY 2007 Final Operating Plan	FY 2008 Approp	FY 2009 Cong Request
Richland Budget Summary			
Defense Environmental Cleanup			
<u>Hanford Site</u>			
2012 Completion Projects	425,204	419,189	400,902
2035 Completion Projects	410,112	467,309	450,885
Subtotal, Hanford Site	835,316	886,498	851,787
<u>Safeguards and Security</u>			
Subtotal, Defense Environmental Cleanup	908,752	973,001	927,052
Non-Defense Environmental Cleanup			
<u>Fast Flux Test Reactor Facility D&D</u>			
Subtotal, Non-Defense Environmental Cleanup	34,843	10,248	10,755
Total, Richland	943,595	983,249	937,807



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	FY 2007 Final Operating Plan	FY 2008 Approp	FY 2009 Cong Request
Richland Budget Summary - PBS Level			
Defense Environmental Cleanup			
<u>Hanford Site</u>			
<i>2012 Completion Projects</i>			
RL-0011: NM Stabilization and Disposition-PFP	77,565	97,110	113,483
RL-0012: SNF Stabilization and Disposition	136,086	98,907	122,171
RL-0013B: Solid Waste Stabilization and Disposition-2012	798	0	0
RL-0041: Nuclear Facility D&D-River Corridor Closure Project	210,755	223,172	165,248
Subtotal, 2012 Completion Projects	425,204	419,189	400,902
<i>2035 Completion Projects</i>			
RL-0013C: Solid Waste Stabilization and Disposition-2035	218,036	242,124	175,930
RL-0030: Soil and Water Remediation-Groundwater/Vadose Zone - 2035	87,314	104,591	169,682
RL-0040: Nuclear Facility D&D-Remainder of Hanford - 2035	83,231	97,854	85,653
RL-0080: Operate Waste Disposal Facility	3,199	3,299	0



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	FY 2007 Final Operating Plan	FY 2008 Approp	FY 2009 Cong Request
Richland Budget Summary - PBS Level			
RL-0100: Richland Community and Regulatory Support	18,332	19,441	19,620
Subtotal, 2035 Completion Projects	410,112	467,309	450,885
Subtotal, Hanford Site	835,316	886,498	851,787
<u>Safeguards and Security</u>			
RL-0020: Safeguards and Security	73,436	86,503	75,265
Subtotal, Defense Environmental Cleanup	908,752	973,001	927,052
Non-Defense Environmental Cleanup			
<u>Fast Flux Test Reactor Facility D&D</u>			
RL-0042: Nuclear Facility D&D-Fast Flux Test Facility Project	34,843	10,248	10,755
Subtotal, Non-Defense Environmental Cleanup	34,843	10,248	10,755
Total, Richland	943,595	983,249	937,807



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Significant Changes From FY 2008 to FY 2009

Budget decrease from FY 2008 Appropriations of \$983M to FY 2009 President's Request of \$938M (\$45M)

Increases for:

- Procurement of additional containers to support shipping of special nuclear materials from Plutonium Finishing Plant and increased cost for minimum safe operations in support of shipping special nuclear materials (RL-0011)
- K-East Basin demolition and conceptual design effort for sludge treatment project (RL-0012)
- Materials associated with construction of a pump and treatment facility in the 100-D Area; increased in-situ remediation activities within the HR-3 Operable Unit, and increased characterization drilling along the Columbia River (RL-0030)

Offset by decreases/deferrals in:

- Ongoing activities for deactivation, decontamination, decommissioning, and demolition of facilities/structures in the 100 and 300 Areas, and waste site and burial ground remediation in the 100 Areas (RL-0041)
- Slow downs of transuranic waste retrieval (RL-0013)
- Deferred design completion for the remote-handled TRU waste process capability (RL-0013)
- Deferral of mixed low-level waste treatment and disposition (RL-0013)



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FY 2008 Planned Accomplishments

Defense Appropriations

- Initiate and ship offsite 1,500 Plutonium 3013 containers (RL-0011)
- Complete TPA milestone M-16-45 for the 100-BC Reactor Area (RL-0041)
- Dispose of over 550,000 tons of remediation waste at Environmental Remediation Disposal Facility (RL-0041)
- Retrieve 2,500 cubic meters of suspect transuranic waste (RL-0013)
- Complete K West sludge containerization (RL-0012)
- Complete demolition of K East super structure (RL-0012)
- Enhance the treatment of Carbon Tetrachloride in the Central Plateau (RL-0030)
- Complete construction of 100-KR-4 expansion Pump & Treat for treatment of Hexavalent Chromium (RL-0030)
- Complete apatite sequestration barrier injections at 100-NR-2 (RL-0030)
- Complete 100B Area Export Water System Reliability (RL-0040)
- Initiate Canister Storage Building security upgrades (RL-0020)

Non-Defense Appropriations

- Complete fuel transfer from FFTF to Idaho (RL-0042)



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FY 2009 Planned Accomplishments

Defense Appropriations

- Complete shipment of plutonium off-site (RL-0011)
- Complete interim remedial actions for 100-F Area (RL-0041)
- Complete interim remedial actions for High Environmental Priority waste sites in the 300 Area (RL-0041)
- Continue construction of new disposal cells at the Environmental Restoration Disposal Facility (RL-0041)
- Continue D4 activities in the 300 Areas, including the 324 and 327 facilities, and upgrade utilities to support the 300 Area facilities to be retained for Office of Science use (RL-0041)
- Complete demolition of K-East Basin (RL-0012)
- Retrieve 1,100 cubic meters of suspect transuranic waste from the low-level burial grounds and continue minimal certification of transuranic waste (RL-0013)
- Upgrade remediation approach for hexavalent chromium for 100-KR-4, 100-HR-3H, and 100-HR-3D groundwater remediation systems (RL-0030)
- Initiate design for the final remedial action for the 100-D Area (RL-0030)

Non-Defense Appropriations

- Complete transition of FFTF to long-term surveillance and maintenance (RL-0042)



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Planned Accomplishments -

River Corridor Activities

SNF Stabilization/Disposition (RL-0012) \$122M

FY 2009 Key Planned Accomplishments

- Complete Decontamination & Decommissioning of K East Basin
- Complete processing of K Basin found fuel
- Complete conceptual design (CD-1) for sludge treatment project

The following Tri-Party Agreement milestones are at risk in FY 2009 due to technical issues:

- Initiate Sludge Treatment (M-34-30)
- Complete removal of the K Basins and their content (M-34-00A)



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*Planned Accomplishments -
River Corridor Activities*

Nuclear Facility D&D – River Corridor Closure Project (RL-0041) \$165M

FY 2009 Key Planned Accomplishments

- Completion of Burial Grounds 100-D-32, 100-D-45 and 100-D-40 loadout along with restricted additional waste site and burial ground remediation in the 100-B/C and 100-D Areas along the Columbia River.
- Completion of Waste Site 300-48 and Burial Ground 100-D-41 loadout along with restricted waste site and burial ground remediation in and near the 300 Area along the Columbia River.
- Completion of Burial Ground 118-H-1 loadout.
- Maintenance of safety systems and operations in the 100 Area, 200 Area (Environmental Restoration Disposal Facility), 300 Area, 400 Area, and 600 Area.
- Surveillance and maintenance for inactive facilities, waste sites, and burial grounds in the 100 Area, 200 Area, 300 Area, 400 Area, and 600 Area .
- Operations of the Environmental Restoration Disposal Facility and construction of new disposal cells.
- Risk assessment activities in support of final end state and River Corridor closure.
- Deactivation activities at Building 324 (Chemical Engineering Laboratory) and Building 327 (Post-Irradiation Test Laboratory) in the 300 Area along the Columbia River.



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*Planned Accomplishments -
River Corridor Activities*

Nuclear Facility D&D – River Corridor Closure Project (RL-0041) \$165M

The following Tri-Party Agreement milestones are at risk in FY 2009 due to budget issues:

- Complete the Interim Remedial Actions for the 100 F Area (M-016-49)
- Complete Interim Remedial Actions for 100-IU-2 and 100-IU-6 (M-016-56)
- Complete Interim Remedial Actions for the Remaining High Environmental Priority 300-FF-2 Waste Sites (M-016-61)

The following Tri-Party Agreement milestones are at risk in FY 2009 due to technical issues:

- Initiate Soil Remediation at K West Basin (M-016-58)
- Initiate Response Actions for Remaining Waste Sites for 100 K Area (M-016-52)



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Planned Accomplishments -

River Corridor Activities

Nuclear Facility D&D – FFTF (RL-0042) \$11M

FY 2009 Key Planned Accomplishments

- Complete shutdown of support systems no longer required for long term Surveillance and Maintenance
- Initiate long term Surveillance and Maintenance of Fast Flux Test Facility Complex



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Planned Accomplishments -
Central Plateau Activities

NM Stabilization/Disposition–PFP (RL-0011) \$113M

FY 2009 Key Planned Accomplishments

- Maintain Plutonium Finishing Plant complex facilities
- Maintain safe and secure storage of SNM
- Shipment of Plutonium out of Washington State



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*Planned Accomplishments -
Central Plateau Activities*

SW Stabilization/Disposition (RL-0013C) \$176M

FY 2009 Key Planned Accomplishments

- Operate Key Waste Treatment Facilities
 - T Plant
 - Waste Receiving and Processing Facility
 - 200 Effluent Treatment Facility
- Support work on Tank Closure and Waste Management Environmental Impact Statement
- Continue suspect transuranic retrieval (1,100 cubic meters)
- Continue minimal certification of TRU waste for shipment to WIPP

The following Tri-Party Agreement milestones are at risk in FY 2009 due to budget issues:

- Retrieve 9,700 cubic meters of contact handled retrievably-stored waste by 12/31/08 (M-91-40F)
- Certify 5,400 cubic meters of contact handled TRU mixed waste by 12/31/08 (M-91-42K)
- Treat 8,150 cubic meters of mixed low-level waste by 12/31/08 (M-91-42E)
- Treat 300 cubic meters of large and/or Remote Handled Mixed Low Level Waste (M-91-43C)



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Planned Accomplishments -
Central Plateau Activities

Groundwater Protection (RL-0030) \$170M

FY 2009 Key Planned Accomplishments

- Operate and maintain existing groundwater remediation systems
- Continue groundwater integration activities and environmental data management
- Continue groundwater monitoring
- Drill monitoring wells as prescribed by Tri-Party Agreement M-24-00
- Complete Remedial Design/Remedial Action Work Plan for 200-ZP-1/PW-1,3,6
- Completion of four M-15 Tri-Party Agreement Milestones to submit feasibility studies and proposed plans
- Complete Groundwater River Corridor Remedial Investigations Work Plans
- Decommission 100 groundwater wells
- Complete New Pump and Treatment system and well network expansion at 100-D



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Planned Accomplishments -

Central Plateau Activities

Nuclear Facility D&D – Remainder of Hanford (RL-0040) \$86M

FY 2009 Key Planned Accomplishments

- Maintain Surveillance and Maintenance for Central Plateau waste sites and facilities awaiting final disposition.
- Perform essential infrastructure replacements and upgrades
- Support infrastructure activities such as steam, occupational medicine and service contracts



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*Planned Accomplishments -
Central Plateau Activities*

Safeguards and Security (RL-0020) \$75M

FY 2009 Key Planned Accomplishments

- Continue support of offsite plutonium shipments from the Plutonium Finishing Plant
- Maintain protection of special nuclear materials
- Maintain site-wide security



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