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

Environmental Management Program
~ Budget Update ~
Strengthening the Foundation of our Future: Investments to Maximize Risk Reduction

EM Priorities In The FY 2008 and 2009 Budget

- Conduct safe operations
- Support post-closure benefits and liability requirements
- Fully establish the disposition capability for radioactive liquid tank waste, special nuclear materials, and spent nuclear fuel
- Dispose of remote handled (RH) and contact handled (CH) transuranic waste and low-level radioactive waste
- Continue to remediate contaminated soil and groundwater
- Decontaminate and decommission facilities no longer needed
Strengthening the Foundation of our Future:
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FY 2008 and FY 2009 Budget Distribution

FY 2008 Appropriation

- Radioactive Liquid Waste Stabilization/Disposition: 31%
- Solid Waste Stabilization / Disposition: 16%
- Spent Nuclear Fuel Stabilization / Disposition: 13%
- Decontamination / Decommissioning: 10%
- Special Nuclear Materials and Safeguards & Security: 9%
- Soil and Water Remediation: 8%
- Site Closure: 2%
- Other: 3%

FY 2009 Request

- Radioactive Liquid Waste Stabilization/Disposition: 32%
- Solid Waste Stabilization / Disposition: 14%
- Spent Nuclear Fuel Stabilization / Disposition: 15%
- Decontamination / Decommissioning: 14%
- Special Nuclear Materials and Safeguards & Security: 10%
- Soil and Water Remediation: 3%
- Site Closure: 2%
- Other: 3%
**Strengthening the Foundation of our Future:**
**Investments to Maximize Risk Reduction**

**FY 2008 and FY 2009 Budget**

<table>
<thead>
<tr>
<th>Site</th>
<th>FY 2008 Approp(^a)</th>
<th>FY 2009 Request(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad</td>
<td>246,599</td>
<td>224,852</td>
</tr>
<tr>
<td>Idaho</td>
<td>523,485</td>
<td>447,400</td>
</tr>
<tr>
<td>Oak Ridge</td>
<td>505,186</td>
<td>464,872</td>
</tr>
<tr>
<td>Paducah</td>
<td>142,219</td>
<td>153,433</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>225,026</td>
<td>242,561</td>
</tr>
<tr>
<td>Richland</td>
<td>1,028,600</td>
<td>980,088</td>
</tr>
<tr>
<td>River Protection</td>
<td>991,203</td>
<td>1,001,008</td>
</tr>
<tr>
<td>Savannah River</td>
<td>1,327,663</td>
<td>1,390,693</td>
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<tr>
<td>NNSA Sites</td>
<td>302,661</td>
<td>256,632</td>
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<td>Closure Sites</td>
<td>76,846</td>
<td>78,325</td>
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<tr>
<td>West Valley Demonstration Project</td>
<td>55,485</td>
<td>59,000</td>
</tr>
<tr>
<td>All Other Sites</td>
<td>80,586</td>
<td>65,868</td>
</tr>
<tr>
<td>Headquarters Operations</td>
<td>168,210</td>
<td>132,641</td>
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<tr>
<td>Technology Development &amp; Deployment</td>
<td>21,194</td>
<td>32,389</td>
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<tr>
<td>D&amp;D Fund Deposit</td>
<td>458,787</td>
<td>463,000</td>
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<tr>
<td>Subtotal, EM</td>
<td>6,153,750</td>
<td>5,992,762</td>
</tr>
<tr>
<td>Offset</td>
<td>-458,787</td>
<td>-464,762</td>
</tr>
<tr>
<td>Total, EM</td>
<td>5,694,963</td>
<td>5,528,000</td>
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</tbody>
</table>

\(^a\)Funding for Program Direction and Safeguards and Security activities distributed across sites.
**Strengthening the Foundation of our Future:**

*Investments to Maximize Risk Reduction*

**EM and DOE Budgets by State**

<table>
<thead>
<tr>
<th>State</th>
<th>FY08 EM Appropriation (a)</th>
<th>FY08 DOE Appropriation</th>
<th>FY09 EM Request (a)</th>
<th>FY09 DOE Request</th>
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<tbody>
<tr>
<td>California</td>
<td>$27,854</td>
<td>$2,231,310</td>
<td>$17,603</td>
<td>$2,201,153</td>
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<tr>
<td>Colorado</td>
<td>6,150</td>
<td>652,165</td>
<td>9,302</td>
<td>575,976</td>
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<tr>
<td>Idaho</td>
<td>523,485</td>
<td>1,167,797</td>
<td>447,400</td>
<td>1,202,194</td>
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<tr>
<td>Illinois</td>
<td>433</td>
<td>888,824</td>
<td>459</td>
<td>955,335</td>
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<tr>
<td>Kentucky</td>
<td>142,219</td>
<td>158,059</td>
<td>153,433</td>
<td>157,946</td>
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<tr>
<td>Nevada</td>
<td>84,408</td>
<td>728,533</td>
<td>69,354</td>
<td>755,880</td>
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<tr>
<td>New Mexico</td>
<td>408,946</td>
<td>4,536,467</td>
<td>396,630</td>
<td>4,227,103</td>
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<tr>
<td>New York</td>
<td>111,257</td>
<td>976,583</td>
<td>82,933</td>
<td>1,017,696</td>
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<tr>
<td>Ohio</td>
<td>304,394</td>
<td>378,323</td>
<td>320,444</td>
<td>376,840</td>
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<tr>
<td>South Carolina</td>
<td>1,327,663</td>
<td>1,931,111</td>
<td>1,390,693</td>
<td>2,258,948</td>
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<tr>
<td>Tennessee</td>
<td>505,186</td>
<td>2,440,822</td>
<td>464,872</td>
<td>2,517,332</td>
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<td>Texas</td>
<td>20,027</td>
<td>617,034</td>
<td>0</td>
<td>651,707</td>
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<tr>
<td>Utah</td>
<td>23,734</td>
<td>72,672</td>
<td>30,513</td>
<td>73,527</td>
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<tr>
<td>Washington State</td>
<td>2,019,803</td>
<td>2,459,803</td>
<td>1,981,096</td>
<td>2,419,217</td>
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<tr>
<td>Washington, DC</td>
<td>189,404</td>
<td>3,475,178</td>
<td>165,030</td>
<td>3,890,867</td>
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<tr>
<td>Non-EM States</td>
<td>0</td>
<td>3,313,698</td>
<td>0</td>
<td>3,366,841</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$5,694,963</strong></td>
<td><strong>$26,028,379</strong></td>
<td><strong>$5,529,762</strong></td>
<td><strong>$26,648,562</strong></td>
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<tr>
<td>Prior Year Adjustment</td>
<td>0</td>
<td></td>
<td>-1,762</td>
<td></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$5,694,963</strong></td>
<td><strong>$26,028,379</strong></td>
<td><strong>$5,528,000</strong></td>
<td><strong>$26,648,562</strong></td>
</tr>
</tbody>
</table>

(a) Distribution includes funding for Program Direction and Safeguards & Security
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FY 2008 and FY 2009 Key Accomplishments

• Tank Waste Processing
  – The overall Waste Treatment and Immobilization facility at Hanford will be 56% complete by the end of FY 2009
  – Continue construction of the Sodium Bearing Waste facility at Idaho and the Salt Waste Processing facility at Savannah River
  – Grouted and closed 7 underground tanks at Idaho

• Consolidation and Disposition of Surplus Plutonium, Spent Nuclear Fuel, and Uranium
  – Begin disposition of surplus non-pit plutonium at Savannah River in FY 2008
  – Complete consolidation of Hanford special nuclear material at Savannah River in FY 2009
  – Complete K West sludge containerization at Hanford in FY 2008
  – Complete all wet to dry spent fuel transfers at Idaho by the end of FY 2009
  – Complete construction and start operations of Depleted Uranium Hexafluoride (DUF6) Conversion Facilities at Portsmouth and Paducah by the end of FY 2009
  – Finalize the design for Uranium 233 blend down equipment and initiate building 3019 modifications at Oak Ridge by the end of FY 2009

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FY 2008 and FY 2009 Key Accomplishments (cont.)

• Disposition of Legacy Waste
  – Obtain RH and CH TRU waste certification at Oak Ridge in FY 2008 and begin shipping to the Waste Isolation Pilot Plant (WIPP)
  – Complete shipment of all TRU legacy drums at Savannah River to WIPP for disposal
  – Complete shipment of all EM RH TRU waste at Idaho to WIPP in FY 2008
  – Complete disposition of all legacy low-level, mixed low-level waste, and TSCA waste at Paducah in FY 2009

• Soil and Groundwater remediation and D&D
  – Upgrade groundwater remediation approach at Hanford in FY 2009
  – Complete Environmental Impact Statement for the Energy Technology and Engineering Center (ETEC)
  – Complete D&D of Test Area North at Idaho in FY 2008
  – Begin demolition of K-25 processing facility in Oak Ridge in FY 2009
  – Complete demolition of K-East basin at Hanford in FY 2009

• Site cleanup completions
  – Up to 4 in FY 2008
  – Up to 2 in FY 2009
## Progress Measures

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Projected to be Completed Through FY 2008</th>
<th>Projected to be Completed Through FY 2009</th>
<th>Percent Projected to be Completed Through FY 2009</th>
<th>Lifecycle Total</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plutonium packaged for long-term disposition</td>
<td>Measure Complete</td>
<td>100%</td>
<td>6,314</td>
<td>Number of Containers</td>
<td></td>
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<tr>
<td>Enriched Uranium packaged for disposition</td>
<td>7,278</td>
<td>7,300</td>
<td>98%</td>
<td>7,482</td>
<td>Number of Containers</td>
</tr>
<tr>
<td>Plutonium and Uranium Residues packaged for disposition</td>
<td>Measure Complete</td>
<td>100%</td>
<td>107,828</td>
<td>kg Bulk</td>
<td></td>
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<tr>
<td>Depleted Uranium and Uranium packaged for disposition</td>
<td>11,860</td>
<td>29,371</td>
<td>4%</td>
<td>692,982</td>
<td>Metric Tons</td>
</tr>
<tr>
<td>Liquid Waste eliminated</td>
<td>0.7 million</td>
<td>1.4 million</td>
<td>2%</td>
<td>88 million</td>
<td>gallons</td>
</tr>
<tr>
<td>Liquid Waste Tanks closed</td>
<td>9</td>
<td>9</td>
<td>4%</td>
<td>239</td>
<td>Number of tanks</td>
</tr>
<tr>
<td>High Level Waste Packaged for final disposition</td>
<td>2,835</td>
<td>3,021</td>
<td>13%</td>
<td>22,464</td>
<td>Number of Containers</td>
</tr>
<tr>
<td>SNF Packaged for final disposition</td>
<td>2,128</td>
<td>2,128</td>
<td>88%</td>
<td>2,418</td>
<td>MT Heavy Metal</td>
</tr>
<tr>
<td>Transuranic Waste dispositioned (Total CH and RH)</td>
<td>53,608</td>
<td>63,738</td>
<td>40%</td>
<td>157,664</td>
<td>cubic meters</td>
</tr>
<tr>
<td>Low Level /Mixed Low Level Waste disposed</td>
<td>1,035,030</td>
<td>1,049,410</td>
<td>76%</td>
<td>1,380,370</td>
<td>cubic meters</td>
</tr>
<tr>
<td>Material Access Areas (MAAs) eliminated</td>
<td>11</td>
<td>11</td>
<td>85%</td>
<td>13</td>
<td>Number of MAAs</td>
</tr>
<tr>
<td>Nuclear Facility D&amp;D Completions</td>
<td>89</td>
<td>92</td>
<td>20%</td>
<td>454</td>
<td>Number of Facilities</td>
</tr>
<tr>
<td>Radioactive Facility D&amp;D Completions</td>
<td>352</td>
<td>362</td>
<td>40%</td>
<td>902</td>
<td>Number of Facilities</td>
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<tr>
<td>Industrial Facility D&amp;D Completions</td>
<td>1,480</td>
<td>1,503</td>
<td>42%</td>
<td>3,619</td>
<td>Number of Facilities</td>
</tr>
<tr>
<td>Remediation Complete</td>
<td>6,747</td>
<td>6,868</td>
<td>65%</td>
<td>10,547</td>
<td>Number of Release Sites</td>
</tr>
<tr>
<td>Geographic Sites Eliminated</td>
<td>90</td>
<td>92</td>
<td>85%</td>
<td>108</td>
<td>Number of Sites</td>
</tr>
</tbody>
</table>
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EM Budget History

![Bar chart showing EM budget history from FY01 to FY09 Request.](image)
**Strengthening the Foundation of our Future:**

*Investments to Maximize Risk Reduction*

**Summary**

- With the FY 2008 and 2009 budget, EM will focus on reducing risk while maximizing compliance with regulatory commitments.

- Strengthen existing Program and Project Management capabilities
  - Review and approval of all near-term environmental cleanup project baselines completed
  - Life-cycle planning estimates developed and independently reviewed
  - Certification of earned value management systems
  - Best-in Class initiatives
  - Technology Roadmap and Technology Readiness Assessments
  - Human Capital initiatives