

Environmental Management FY 2006 Budget Request



**Keeping Our
Commitments:**
Proven to Deliver

Safe for the Workers, Protective of the Environment, and Respectful of the Taxpayer

February 7, 2005

EM Vision

Deliver real risk reduction and environmental cleanup that is:

- Safe for the Workers,***
- Protective of the Environment, and***
- Respectful of the Taxpayer***

Deliver cleanup that this country expects and deserves

Results

- **Rocky Flats:**

- 2001: GAO reported that Rocky Flats had little chance of closing as scheduled by end of 2006.
- Today: On track to close ahead of schedule

- **Ohio: Mound and Fernald**

- 2001: Lost focus on closure, completion was not expected until 2008 to 2010
- Today: On track to close both Fernald and Mound in 2006

- **Hanford:**

- 2001: Spent nuclear fuel in water-filled basins, years worth of radioactive liquid waste in underground single-shell tanks, radioactive liquid tank waste treatment plant path forward uncertain
- Today: All spent nuclear fuel removed from basins, all pumpable liquid waste removed from single shell tanks, dramatically reducing risk to the Columbia River; waste treatment plant approximately 35 percent construction complete

Results

- **Savannah River:**

- 2001: F-Canyon operating, plutonium (Pu) stabilization not started, not shipping transuranic (TRU) waste to WIPP
- Today: F-Canyon being decommissioned, Pu stabilization and Pu residue missions completed, shipped 2,000 meters of TRU waste to WIPP

- **Idaho:**

- 2001: Spent nuclear fuel stored in several water filled basins across site, massive decaying infrastructure
- Today: All spent nuclear fuel dry-stored or consolidated into the most robust storage basins, water removed from several basins, reducing risks to the underlying Snake River aquifer. Over a quarter-million square feet of facility infrastructure safely removed

- **Security:**

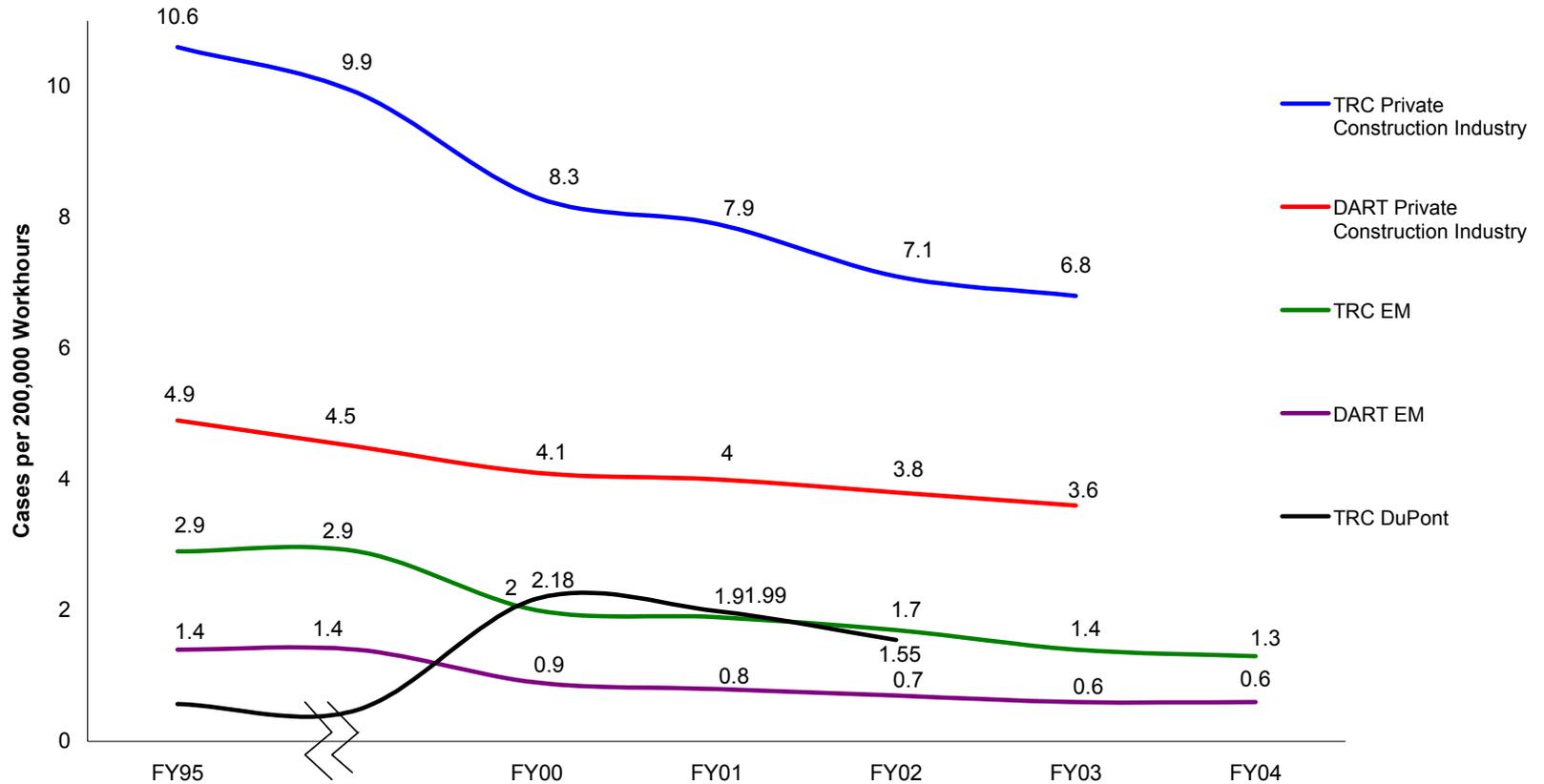
- 2001: 14 areas storing Special Nuclear Material
- Today: Reduced number by over half, 2 more storage areas closing in 2006

Results

- *Every site safer and more secure*
- *Worker safety has improved*
- *Urgent environmental risk has been reduced or eliminated*
- *Positive and measurable return to the community and taxpayer*
- *Program set up to deliver more risk reduction and cleanup going forward*

Safe for the Workers

EM* Integrated Safety Performance
FY95 through FY04



* EM Contractor CAIRS Data as of 2/1/05
 TRC - Total Recordable Case
 DART - Days Away, Restricted or Job Transfer

Safe for the Workers

- **EM has improved worker safety, reducing the rate of reportable accidents and injuries by 40%, even though our workers are dealing with dangerous and hazardous materials.**
- **Our goal is to eliminate accidents and injury for our workers**

Protective of the Environment

EM Corporate Performance Measures ^a

| Performance Measure | Units | Cumulative Complete Through FY 2005 (%) | Completed Through FY 2006 | Completed Through FY 2007 | Completed Through FY 2008 | Lifecycle Total |
|--|-----------------|---|---------------------------|---------------------------|---------------------------|-----------------|
| Pu packaged for long-term disposition | # Cont. | 6,345 (>100%) | Completed | | | 5,850 |
| Pu/U residues packaged for disposition | kg Bulk | 107,775 (100%) | Completed | | | 107,782 |
| eU packaged for disposition | # Cont. | 4,117 (49%) | 6,332 | 7,092 | 7,314 | 8,428 |
| DU & U packaged for disposition | MT | 9,057 (1%) | 9,243 | 35,587 | 61,931 | 685,161 |
| MAAs eliminated | # MAA's | 8 (57%) | 9 | 10 | 10 | 14 |
| SNF packaged for disposition | MTHM | 2,125 (88%) | 2,127 | 2,130 | 2,151 | 2,420 |
| TRU disposed | m3 | 30,546 (22%) | 40,731 | 56,946 | 72,308 | 140,905 |
| LL/LLMW disposed | m3 | 722,264 (62%) | 752,071 | 836,521 | 860,687 | 1,161,773 |
| Liquid Waste eliminated | gallons (1000s) | 0 (0%) | 888 | 2,788 | 4,688 | 88,000 |
| Liquid Waste Tanks closed | # Tanks | 2 (1%) | 3 | 5 | 7 | 241 |
| HLW packaged for disposition | # Cont. | 2,237 (12%) | 2,487 | 2,737 | 2,987 | 18,735 |
| Remediation Complete | # Rel. Sites | 4,467 (58%) | 4,732 | 4,901 | 5,125 | 7,666 |
| Nuclear Facility Completions | # Facs. | 48 (9%) | 66 | 84 | 118 | 511 |
| Radioactive Facility Completions | # Facs. | 245 (30%) | 279 | 285 | 321 | 821 |
| Industrial Facility Completions | # Facs. | 1,061 (34%) | 1,158 | 1,269 | 1,793 | 3,098 |
| Geographic Sites eliminated | # Sites | 79 (74%) | 86 | 87 | 87 | 107 |

^a Consistent with the FY 2006 budget, figures are comparable based on the planned transfer of seven EM sites to NNSA in FY 2006.

Protective of the Environment

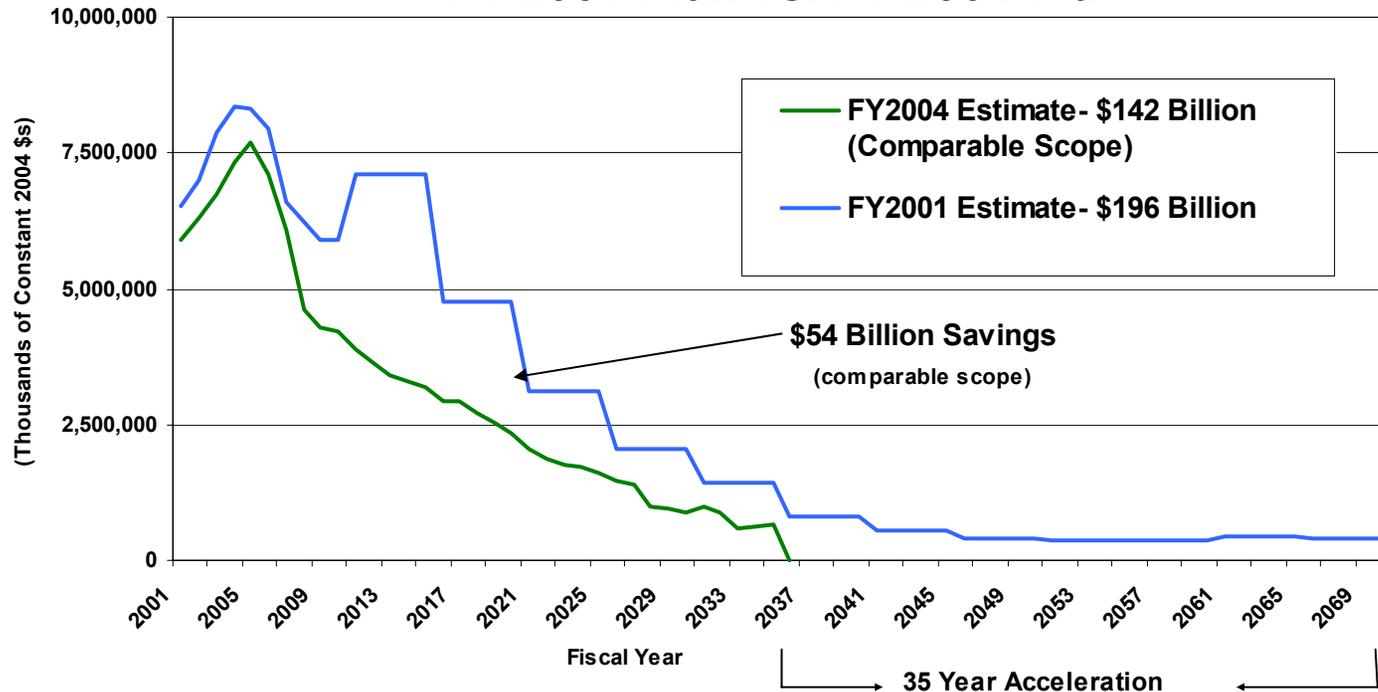
- **Plutonium Packaged: COMPLETED.** Packaged all plutonium and plutonium residues.
- **Package Plutonium Residues: COMPLETED**
- **Reduction in material access areas:** Eliminated one half of the areas.
- **High Level Waste Canisters:** Produced 1,700 canisters of immobilized high level waste (over 1,000 since FY 2000)
- **Facility completions:** Decontaminated/decommissioned and demolished over 1,190 facilities including 250,000 square feet at ID.
- **Transuranic Waste Disposition:** Since its opening in 1999, EM has safely disposed of over 20,000 cubic meters of TRU waste.
- **Low-Level/Mixed Waste Disposal:** Disposed of over 659,000 cubic meters of low-level and mixed low-level waste.

Safe for the Workers, Protective of the Environment, and Respectful of the Taxpayer

Respectful of the Taxpayer

EM Life Cycle Costs*

FY 2001 Plan vs. FY 2004 Plan



*Does not include FY 2006 transfers

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Keeping Our Commitments

In FY 2006, we will

- Work to eliminate accidents and injuries from EM activities
- Complete cleanup at Rocky Flats, Fernald, Mound, and four other sites
- Complete cleanup of Melton Valley at Oak Ridge
- Package an additional 250 containers of High-Level Waste at Savannah River
- Complete H-Reactor cocooning at Hanford

In FY 2006, we will

- Complete packaging of over 25% of the total inventory of enriched uranium
- Complete remediation of 265 contaminated areas ---cumulatively completing over 60% of life-cycle scope
- Continue to empty and clean underground radioactive waste tanks
- Remove the sludge from the K-Basins at Hanford
- Remove all remaining Depleted Uranium cylinders at Oak Ridge

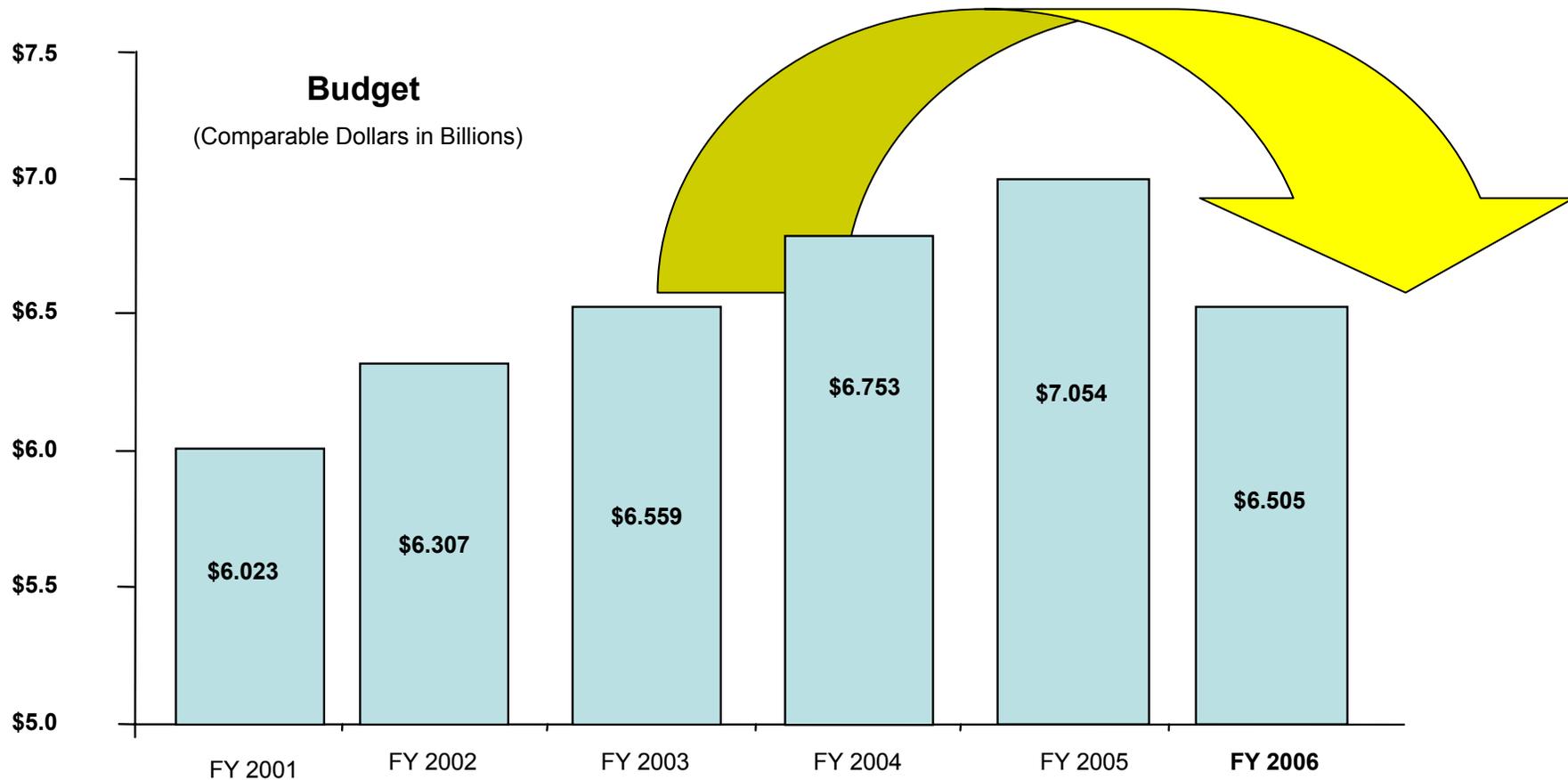
In FY 2006, we will

- Complete construction of the Integrated Disposal Facility at Hanford
- Start construction of Salt Waste Processing Facility at SRS
- Start transition to decontamination and decommissioning at Portsmouth Gaseous Diffusion Plant
- Start disposal of remote-handle transuranic waste at WIPP and ship over 10,000 meters of transuranic waste
- Work with NNSA to complete cleanup at Kansas City Plant, Lawrence Livermore National Lab, and Sandia National Lab— EM's responsibility until 2006.

Safe for the Workers, Protective of the Environment, and Respectful of the Taxpayer

On Course to Meet Our Objectives

The investments have resulted in accelerated risk reduction, site closures, and a payoff for all Americans.



Safe for the Workers, Protective of the Environment, and Respectful of the Taxpayer

We Must Stay True to the Strategy

- Continue to Improve**
- Seek new Opportunities**
- Face up to our Challenges**