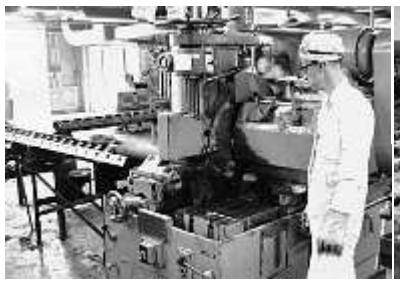
Rocky Flats:





Nuclear Weapons Manufacturing | **Cleanup** | **National Wildlife Refuge**

Fernald:





Uranium Processing | **Cleanup** | **Wetlands**

Environmental Management

Reducing risk to our country, citizens, and environment through nuclear waste cleanup

EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

EM manages the largest environmental cleanup program in the world . . . .

Two million acres, the size of Rhode Island and Delaware combined

34,000 Workers

Enough nuclear waste to fill the Louisiana Superdome

4,500 facilities to cleanup/demolish

Our program requires us to . . .

Work with some of the most dangerous substances known to humanity

Perform first-of-a-kind tasks in highly hazardous work environments

Design, construct and operate first-of-a-kind technologies and facilities to solve problems that once seemed unsolvable

We have demonstrated successes . . .

Remediation of 86 of 108 total sites

Retrieval of tank waste

Disposal of transuranic waste

Stabilization and storage of plutonium

Groundwater pump-and-treat

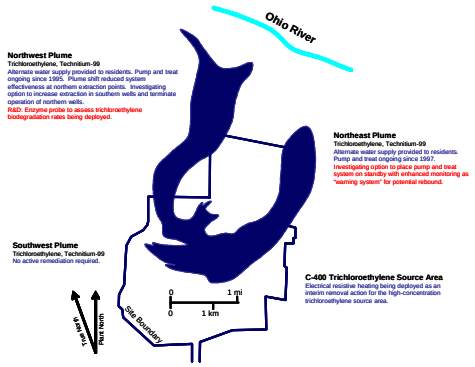
Decontamination and decommissioning of hundreds of facilities

But significant cleanup challenges lie ahead . . .

Retrieving 80+ million gallons of liquid radioactive waste.

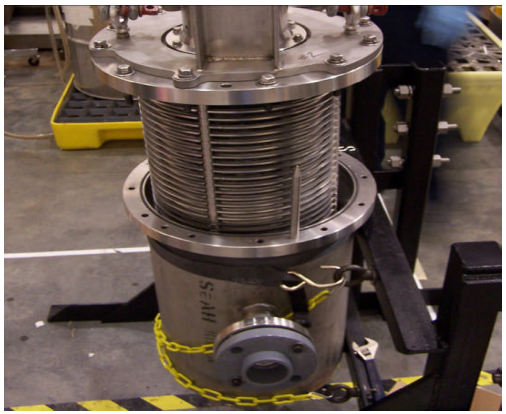
Safely storing it in 200+ underground tanks.

Solidifying it for safe disposal.



Cleaning up 100 sq. miles of contaminated groundwater.

Maintaining a stable and skilled workforce.



Developing and deploying new technologies.

We have created the world's greatest nuclear cleanup organization . . .

Engineers, Scientists, Technologists, and Skilled Crafts and Trades People Accomplish our Cleanup.

Specialized Equipment and Facilities are our Tools.

Safety Processes and Procedures Guide our Work.

And are creating a corporate culture of excellence . . .

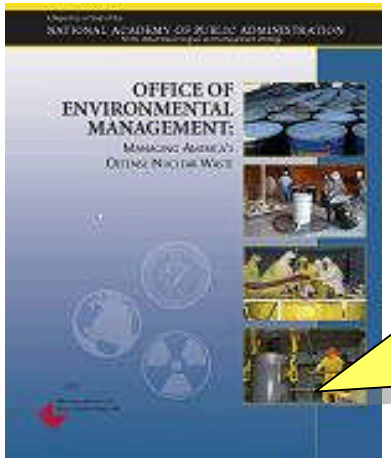
Institutional Best Practices Adopted → **Performance Recognized by National Organizations**

INPO Institute of Nuclear Power Operations

IRAIS CAER

US Army Corps of Engineers ®

- Safety
- Human Capital
- Technology
- Procurement
- Project Management
- Transportation



"EM is on a solid path to becoming a high-performing organization."

--National Academy of Public Administration

- 2006 Project of the Year (Rocky Flats)
- 2007 Project of the Year (Fernald)

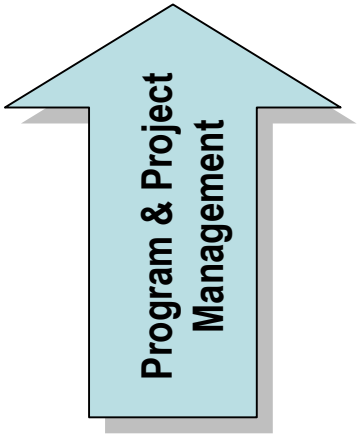
-- Project Management Institute

Our priorities . . .

#1 Priority: Safety

Reduce risk while maximizing regulatory compliance

- Treat **radioactive liquid waste**
- Consolidate and disposition **nuclear materials – plutonium, uranium,** and **spent nuclear fuel**
- Dispose of **transuranic and low-level waste**
- Clean up contaminated **soil and groundwater**
- Decontaminate and decommission **unneeded facilities**



Strengthen program and project management

- Implement **National Academy of Public Administration** recommendations
- Independently verify **project baselines** – scope, cost, schedules
- Strive for **"Best in Class"** capability
- Implement a more effective **procurement process**
- Develop and deploy needed **technologies**
- Focus on **project execution**

We are making significant cleanup progress…

Tank Waste Processing:

- Grout and close seven underground tanks at Idaho in FY08
- Continue construction of the Sodium Bearing Waste Treatment Facility at Idaho and the Salt Waste Processing Facility at Savannah River through FY09
- Complete more than half of Hanford Waste Treatment and Immobilization Plant construction by the end FY09



Disposition of Legacy Waste:

- Begin shipping remote/contact handled transuranic waste from Oak Ridge to WIPP in FY08
- Complete shipment of all EM remote handled transuranic waste at Idaho to WIPP in FY08
- Complete shipment of transuranic legacy drums at Savannah River to WIPP in FY09
- Complete disposition of legacy low-level, mixed low-level and PCB waste at Paducah in FY09

We are making significant cleanup progress…

Consolidation and Disposition of Surplus Plutonium, Spent Nuclear Fuel, and Uranium:

- Complete K-West sludge containerization at Hanford in FY08
- Begin disposition of surplus non-pit plutonium at Savannah River in FY08
- Complete consolidation of Hanford plutonium at Savannah River in FY09
- Complete all wet to dry spent fuel transfers at Idaho by the end of FY09
- Complete construction and start operations of the Depleted Uranium Hexafluoride (DUF6) Conversion Facilities at Portsmouth and Paducah by the end of FY09
- Finalize the design for uranium-233 blend down equipment and initiate Building 3019 modifications at Oak Ridge by the end of FY09



We are making significant cleanup progress…

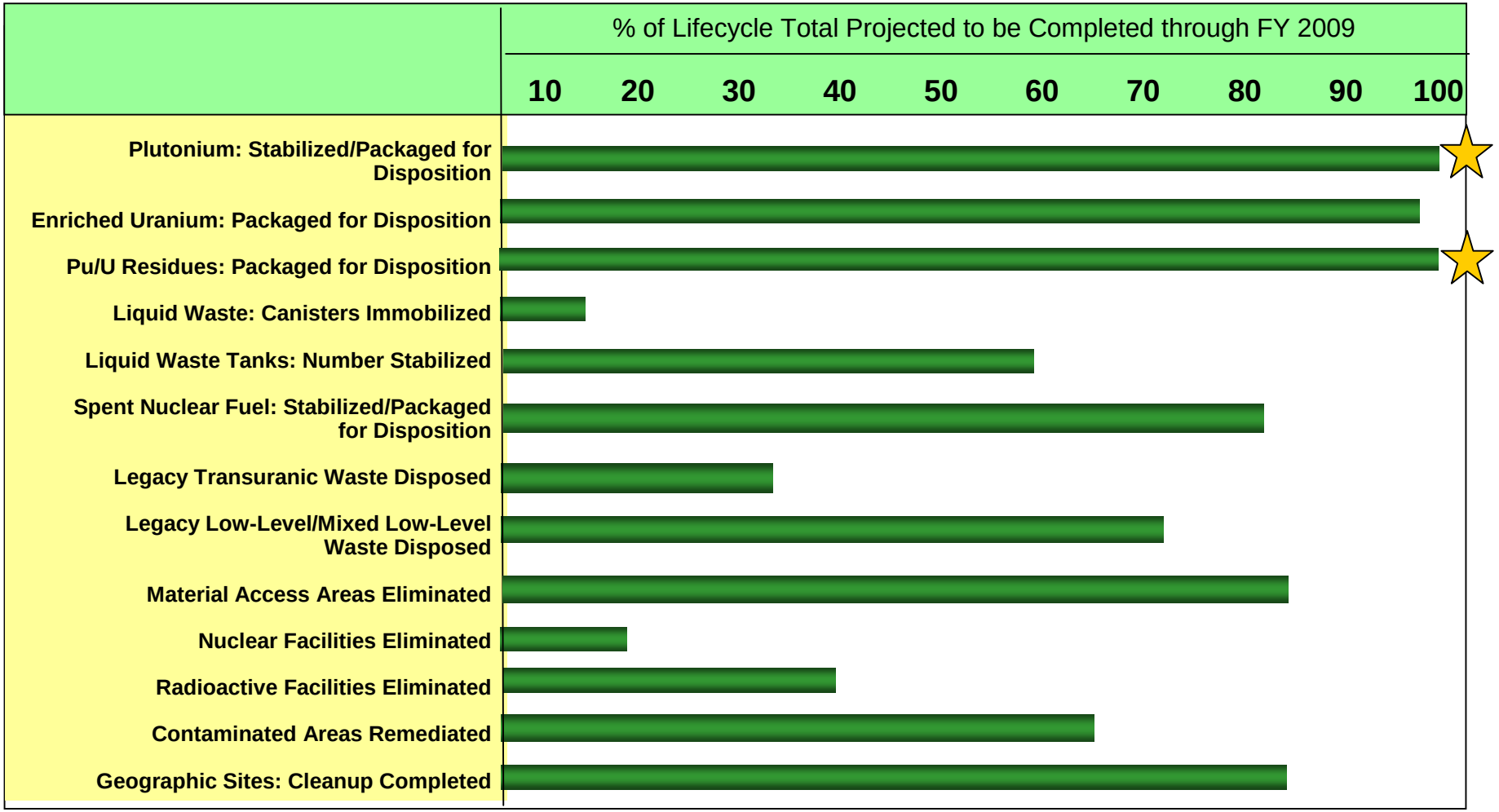
Soil and Groundwater Remediation and Decontamination and Decommissioning:

- Complete decontamination and decommissioning of Test Area North at Idaho in FY08
- Complete demolition of K-East basin at Hanford in FY08
- Begin operations of enhanced groundwater remediation for hexavalent chromium at Hanford in FY09
- Demolish the west wing of the K-25 processing facility in Oak Ridge in FY09

Site Cleanup Completions:

- Complete cleanup of four sites in FY08 and two more in FY09

Bringing us closer to our destination . . .



Issues to be resolved . . .

Regulatory Compliance

The Administration recognizes EM's FY 2009 budget request would not enable the Department to meet some of the milestones contained in agreements that have been negotiated with regulators over many years.

Milestones

Incomplete knowledge of complexity, inconsistent performance, overly optimistic assumptions, and emerging technical barriers have been impediments.

Tools for Resolution

Independently audited cost and schedule baselines, life-cycle planning estimates, and "analytical building blocks" will provide a basis for conducting credible and defensible analyses.

Path to Resolution

Using these tools, we will engage in meaningful dialogue with regulators, stakeholders, and Tribal Nations to assess existing priorities and mutually identify opportunities to complete cleanup.

What EM delivers . . .

Safety

Ensures safe and secure conditions for all planned operations.

Risk *Prioritization*

Fully funds our most costly and high-risk projects.

Risk *Reduction*

Incorporates soil/groundwater and decontamination and decommissioning and remediation.

Waste Disposal Progress

Continues progress to process and dispose of waste.

Key Departmental Missions

Supports special nuclear material processing and disposition.