U.S. DEPARTMENT OF ENERGY





Update on the Office of Environmental Management

Environmental Management Advisory Board Public Meeting
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Augusta, GA

Dr. Inés R. Triay
Assistant Secretary
Office of Environmental Management

EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Presentation Topics

Example of Delivering Performance:
Cleanup of Rocky Flats Site

- Mission and Priorities
- EM Organization
- Journey to Excellence
- Actions to Improve Performance and Reduce Costs
- EM Base and Recovery Act Work
- EM's International Objectives
- Focus Areas for EMAB

EM Mission and Priorities

Mission

"Complete the safe cleanup of the environmental legacy brought about from five decades of nuclear weapons development, production, and Government-sponsored nuclear energy research."

Radioactive tank waste remains a top priority.

Our Priorities Are the Same

- Essential activities to maintain a safe and secure posture in the EM complex
- Radioactive tank waste stabilization, treatment, and disposal
- Spent nuclear fuel storage, receipt, and disposition
- Special nuclear material consolidation, stabilization, and disposition
- High priority groundwater remediation
- Transuranic and mixed/low-level waste disposition
- Soil and groundwater remediation
- Excess facilities deactivation and decommissioning (D&D)

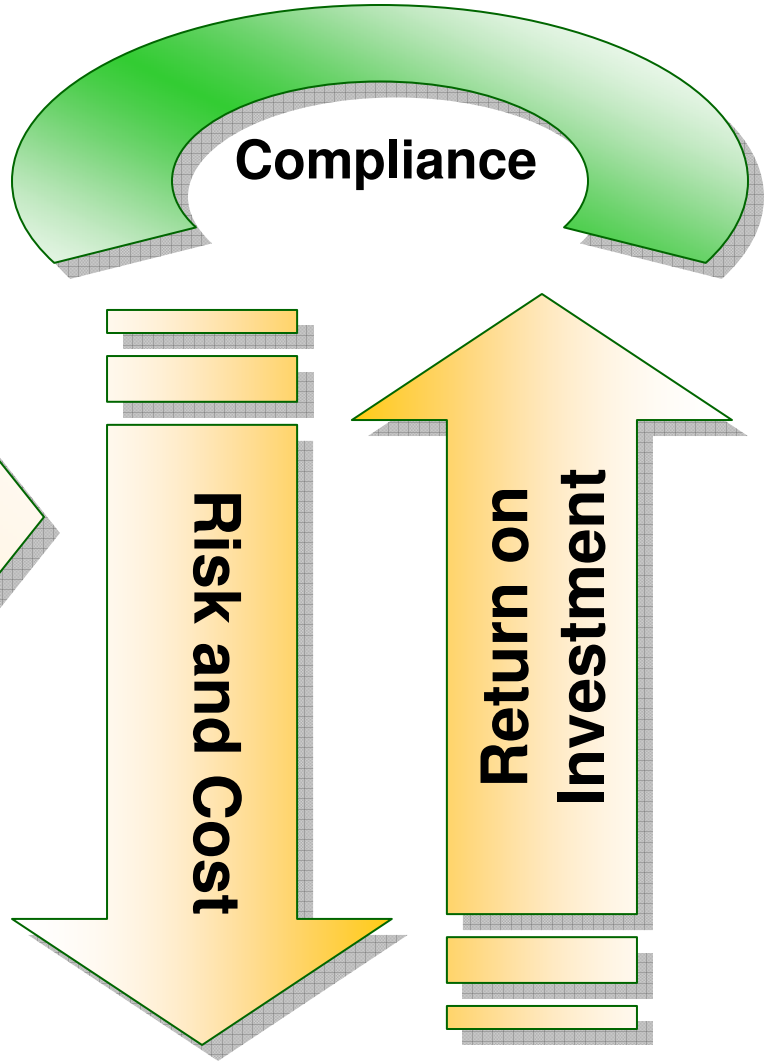
Setting Goals and Achieving Them

Sound business practices
- Near term completions
- Footprint reduction

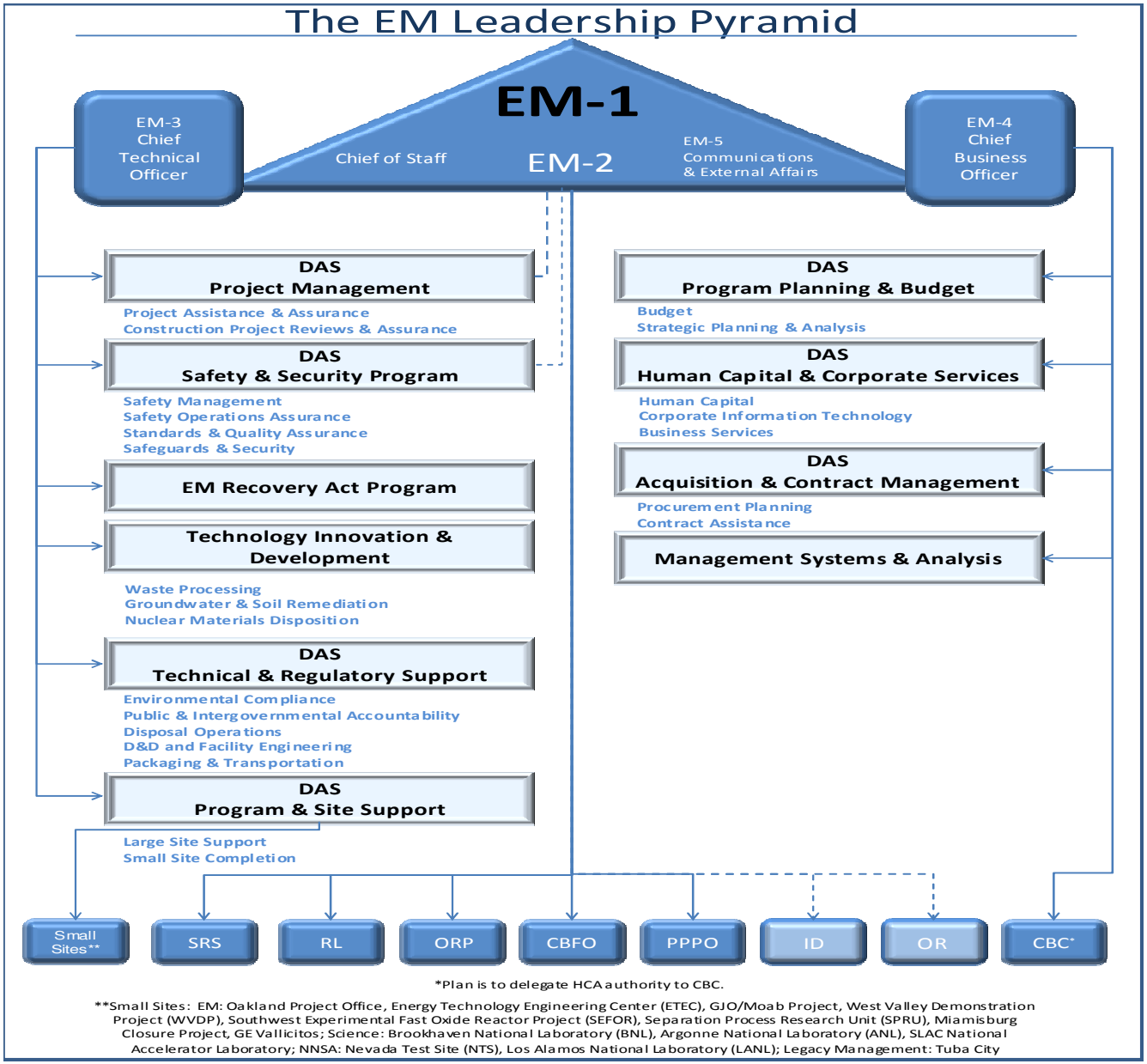
Use science and technology to optimize the efficiency of tank waste disposition

Use science and technology to optimize the efficiency of excess nuclear materials, and spent nuclear fuel disposition

Alternative management approaches for cleanup and for land use



EM Organization



Journey to Excellence: Delivering Performance

Vision

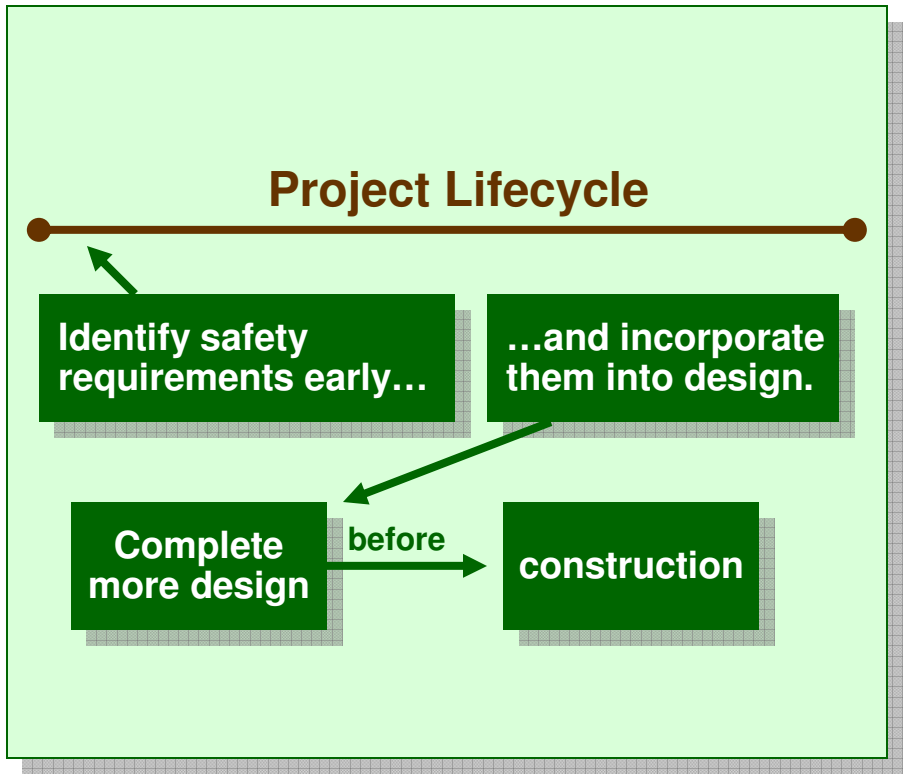
"Our vision is that EM and its contractors are recognized as being among the best at completing quality work safely, on schedule and within cost and delivering demonstrated value to the American Taxpayer."

19 EM soil/water remediation and waste disposition projects completed from 2005-present

- All projects met regulatory deadlines
- 95% completed on schedule
- 84% within 10% of budget

- EM has a solid performance record on cleanup projects
- EM must improve in
  - Delivering all projects within cost and schedule
  - Reducing Operations & Maintenance costs
- This performance must be achieved with Safety as an inherent part of our value system – not to be compromised
  - No schedule, milestone or cost consideration is worth any injury
- Two areas where there is heightened visibility and scrutiny
  - Construction projects
  - Recovery Act projects

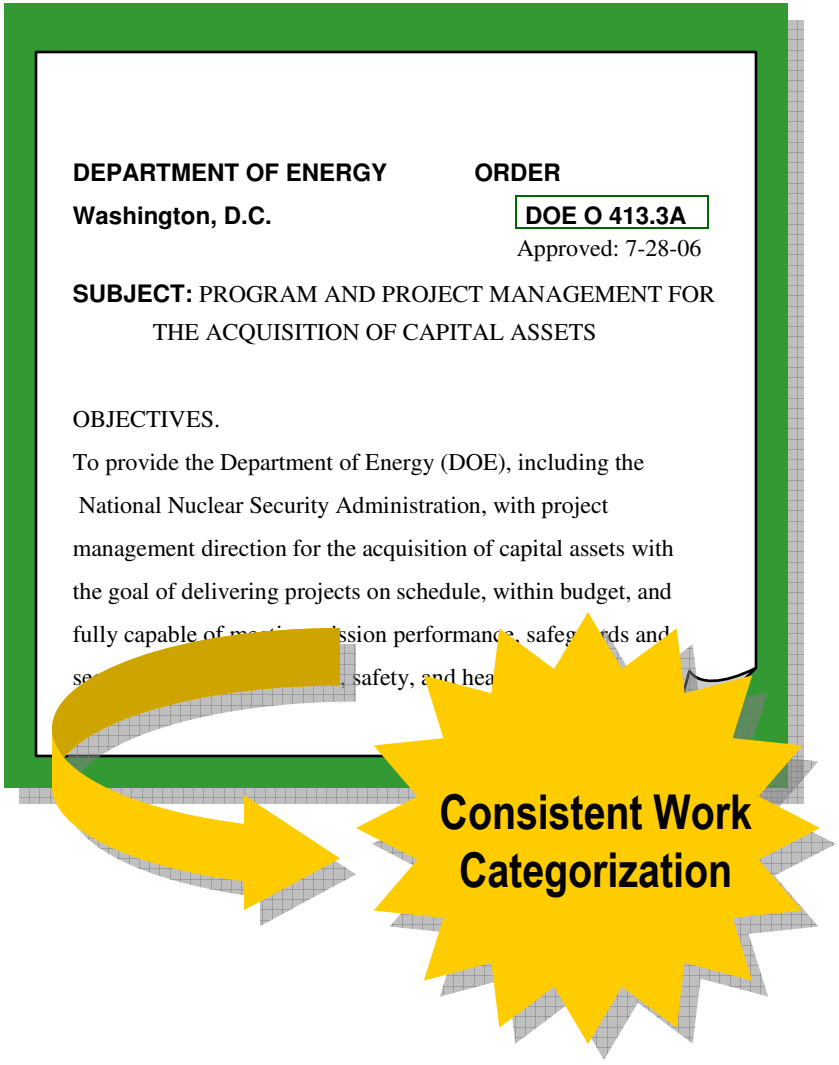
Actions to Improve Performance



- Together we must look for ways to improve performance
- Some actions have already been identified:
  - Compete more design before construction (move away from design/build)
  - Identify safety requirements early and incorporate into design
  - Improve QA, including vendors
  - Implement improved corporate project reviews
  - Improve staff capabilities in key areas
  - Consider owner representative approach

One way to better position ourselves for improving is to more appropriately categorize EM work!

Modify Project Categorization Approach



- Align projects better with DOE Order 413.3A
- Provide enhanced ability to tailor project management
- Create more manageable discrete blocks of work while still tracking life-cycle costs
- Break work into consistent categories:
  - Construction projects
  - Cleanup capital assets projects
  - Operational cleanup projects
  - Programs

Focus Areas for Improvement

Construction only after 90% design

Enhanced Project Management and Federal Oversight (aka Owner Representative)

Restructure the EM portfolio (including acquisition strategy, scope flexibility, and chunking)

Improve Headquarters and Field interaction with better communication

Corporate functions – Improve MA, GC, OECM, and contracts management interaction

Improved external communication and outreach to stakeholders, communities, other agencies, etc.

Critical review of Project Improvement Initiative – (Acquisition and Project Management Corrective Action Plan)

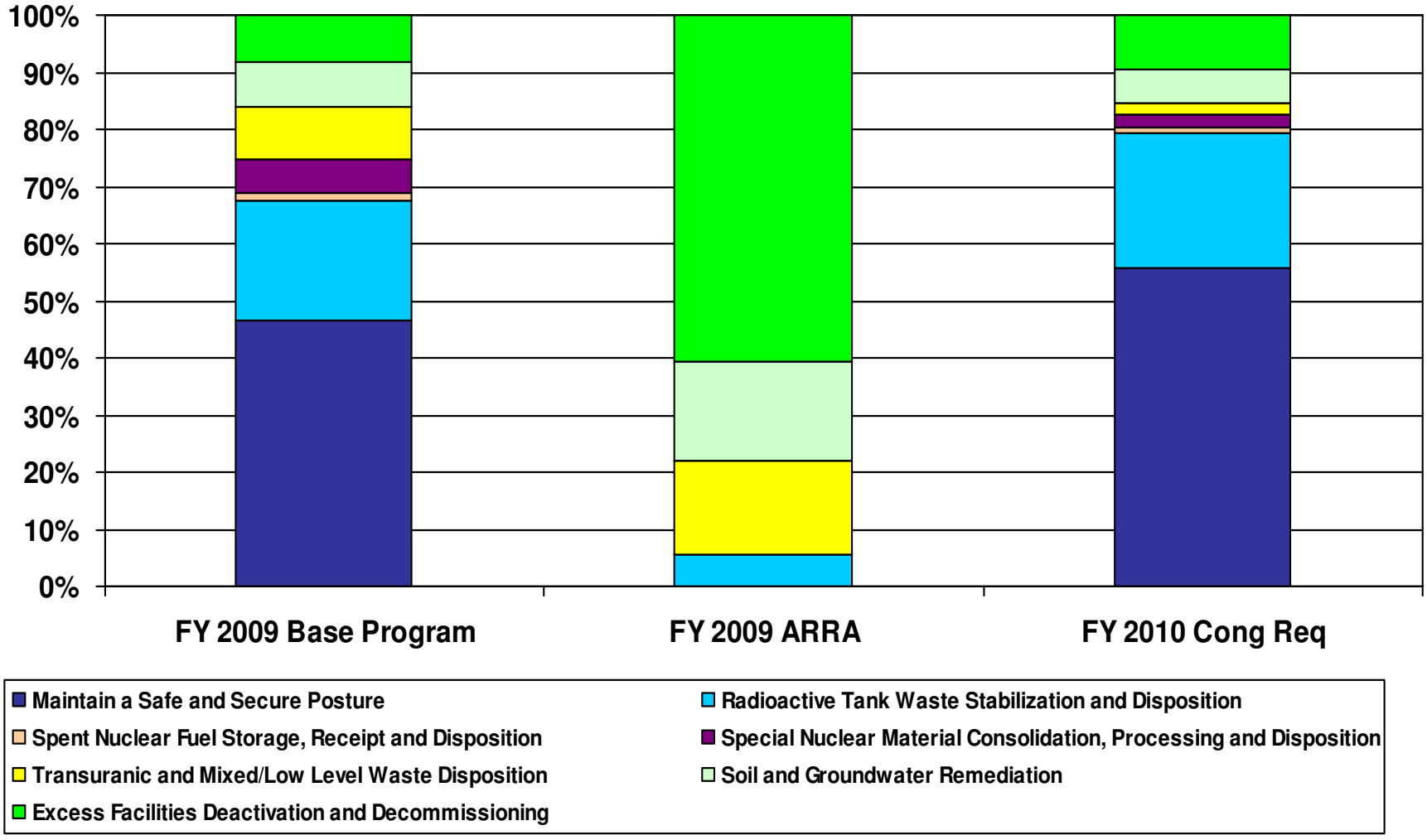
Improved reporting – evaluate current reporting needs and methods and implement better methods for the future

FY 2009 Omnibus, Recovery Act, and FY 2010 Request

Site *(dollars in thousands)*	FY 2009 Original Appropriation[a/]	FY 2009 ARRA[a/]	FY 2010 Congressional Request[a/]
Argonne National Laboratory	29,479	98,500	0
Brookhaven	8,433	42,355	12,614
Energy Technology Engineering Center	15,000	54,175	13,000
Fernald	2,100	0	0
Hanford	1,057,496	1,634,500	993,503
Idaho	489,239	467,875	411,168
Los Alamos National Laboratory	224,639	211,775	189,000
Miamisburg	35,331	19,700	33,243
Moab	40,699	108,350	30,671
Nevada	76,741	44,325	65,674
Oak Ridge	498,688	755,110	411,168
Office of River Protection	1,009,943	326,035	1,098,000
Paducah	169,947	78,800	144,857
Portsmouth	240,715	118,200	319,663
Savannah River	1,361,479	1,615,400	1,342,013
SPRU	18,000	31,775	15,000
Stanford Linear Accelerator Center	4,883	7,925	4,600
Waste Isolation Pilot Plant	240,591	172,375	224,981
West Valley Demonstration Project	66,900	73,875	59,933
Tuba City	5,000	0	0
SEFOR	1,903	0	0
Completed Sites Administration and Support	14,309	0	9,425
Program Direction	309,807	30,000	355,000
Program Support	33,930	40,000	34,000
Uranium Thorium Reimbursement	10,000	68,950	0
Technology Development & Deployment	32,320	0	55,000
Other / Adjustments	-6,000	0	7,212
Total, Environmental Management	5,991,572	6,000,000	5,829,725

[a/] Funding for Safeguards and Security activities distributed across sites.

Comparison of Recovery Act and Base Program Work Scope



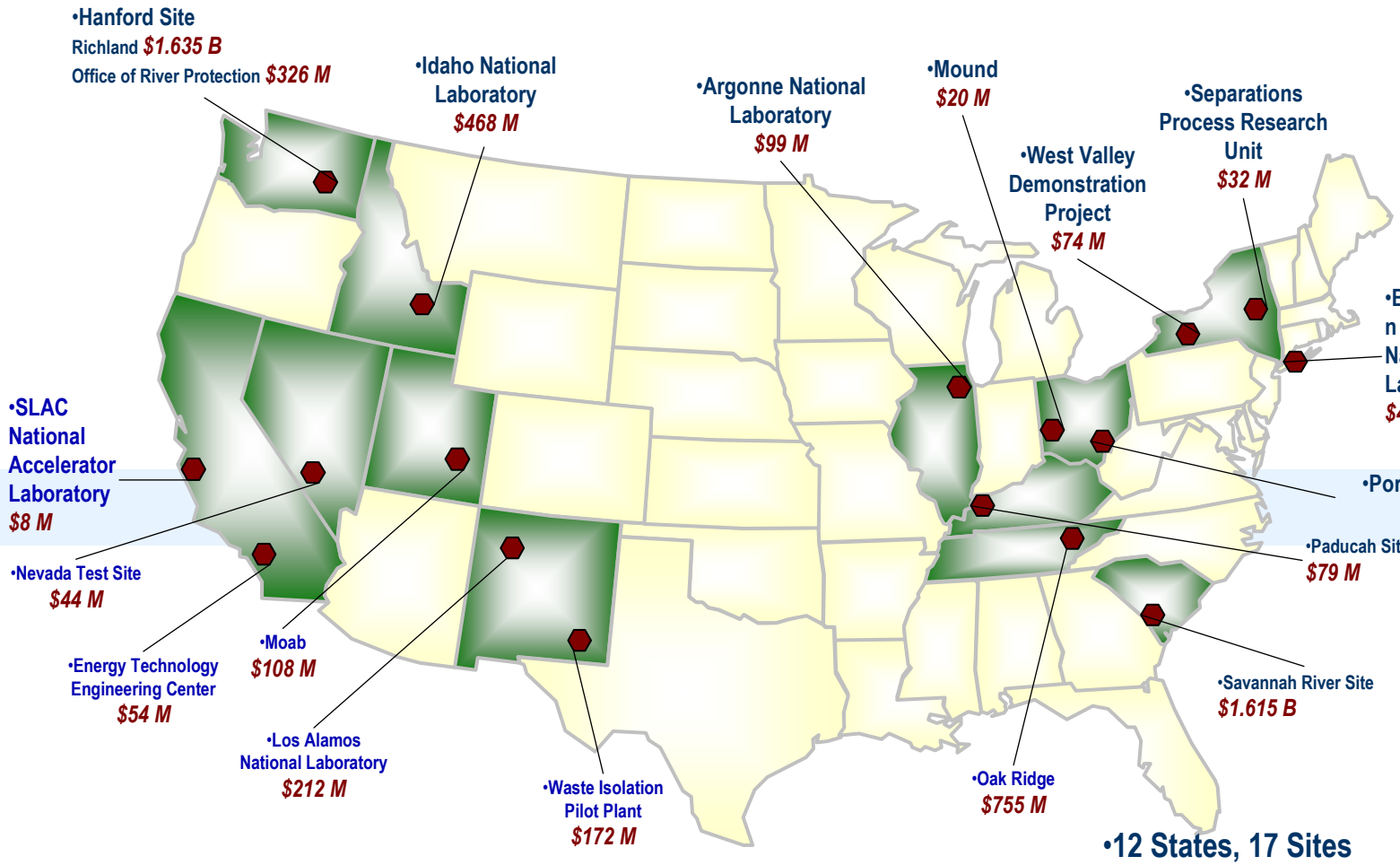
Recovery Act: Sound Business Practices and Investments

EM Highlights So Far

- Over 9,650 jobs created or preserved
- More than 99% of Recovery Act funds have been allocated to sites
- Modifications issued to 29 existing contracts
- Nearly $5.4 billion obligated to contracts for EM Recovery projects
- Over $427 million spent on Recovery work
- Monthly monitoring of project execution and performance
- Active engagement with stakeholders and regulators

- Scope that is most readily accelerated
  - Soil and groundwater remediation
  - Radioactive solid waste disposition
  - Facility decontamination & decommissioning
- "Shovel Ready"
  - Fully defined cost, scope and schedule
  - Established regulatory framework
  - Proven technology
  - Proven performance and safety standards
  - Existing contract vehicles
- Focus on EM completion and footprint reduction
- Recovery Act funding will accelerate approximately 55 compliance milestones
- Demonstrate EM's increased commitment to deliver quality work on schedule and within cost

$6 Billion: Making a Difference in Communities Across the Country



- 12 States, 17 Sites
- Uranium/Thorium $69 M
- Management & Oversight $70 M

EM Strategy

- Focus on reducing risk while maximizing compliance with regulatory commitments
- Improve construction project performance
- Strengthen Technology Development
  - Focus on high-risk activities
  - Potential to significantly reduce life-cycle cost of cleanup
- Continue to evaluate programmatic alternatives
  - Evaluate future execution scenarios
  - Identify opportunities for additional investment opportunities
  - Optimize out year planning

EM International Objectives: Continuing 15 Years of Cooperation

- **Purpose**
  - Study mutual waste management challenges and continue cooperation producing tangible results in the cleanup efforts
- **Current projects**
  - Focus on high-level waste and EM site cleanup needs
- **Strategy**
  - Focus cooperation on EM's accelerated closure mission
  - Leverage International expertise and experience
  - Continue relationships with leading international scientists
  - Promote the EM mission through transformational solutions
- **Explore collaborative technology development with international partners**
  - UK - Nuclear Decommissioning Authority on glass formulation and vitrification technology, and nuclear materials and facility management
  - Russia - glass, groundwater & soils data
  - South Korea - melter technology
  - Potential collaborations with "other" countries
- **Maintain strong international cooperative ties with the IAEA** Waste Safety and Waste Technology Sections and the International Decommissioning Network (IDN)
- **Lead the U.S. government's technical implementation of the Joint Convention** on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management
- **Maintain ties to Nuclear Energy Agency's (NEA)**

Focus Areas for EMAB

- Acquisition, Project Management, and Quality Assurance
- American Recovery and Reinvestment Act
- Energy Parks Initiative
- Human Capital

The Challenge: Maintaining Momentum

- Safely conducting work
- Managing performance-based projects with life cycles over several decades
- Producing results with robust project management practices
- Applying first-of-a-kind technologies
- Achieving footprint reduction and near-term completions
- Managing and maintaining an "able and stable" workforce
- Using Recovery Act funds to create sustainable environmental cleanup jobs, with lasting economic benefits