U.S. DEPARTMENT OF ENERGY

Update on the Office of Environmental Management

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Acting Assistant Secretary
Office of Environmental Management

Environmental Management Advisory Board Public Meeting
Arlington, Virginia
April 29, 2009

EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

EM 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."

- **Largest environmental cleanup effort in the world, originally involving two million acres at 108 sites in 35 states**
- **Safely performing work**
  - **In challenging environments**
  - **Involving some of the most dangerous materials known to man**
  - **Solving highly complex technical problems with first-of-a-kind technologies**
- **Operating in the world's most complex regulatory environment**
- **Supporting other continuing DOE missions and stakeholder partnerships**

Program Priorities

- 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)

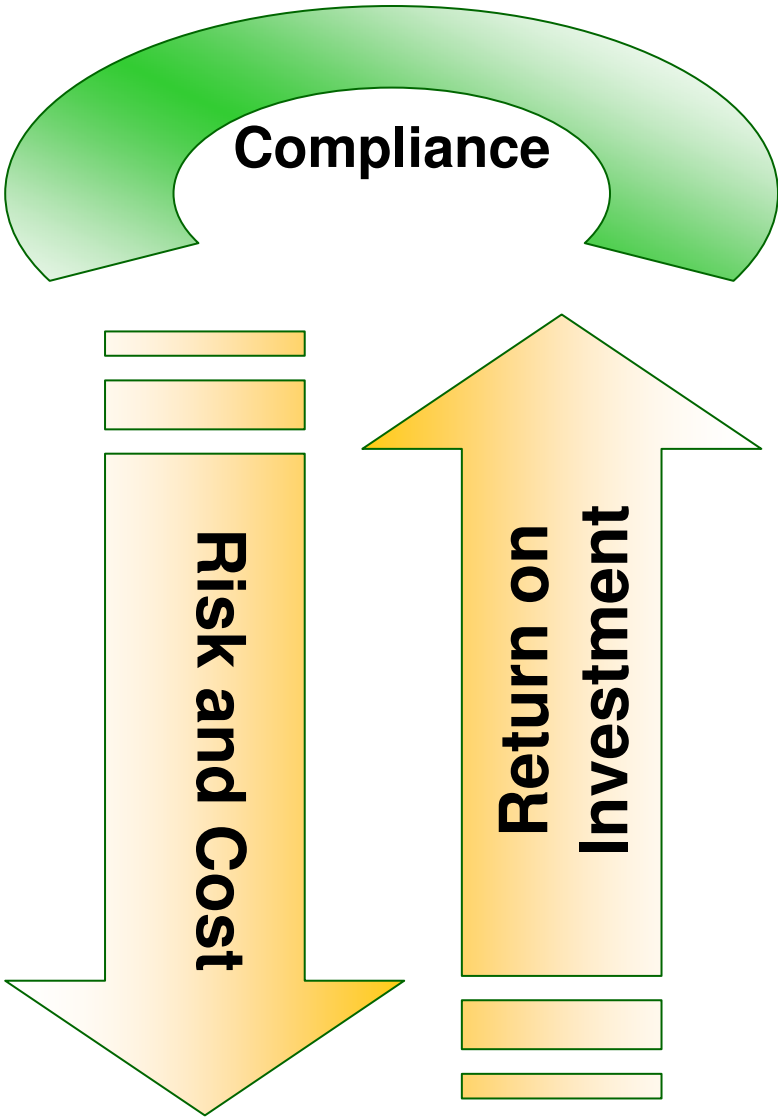
Goal Attainment

Sound business practices
- Near term completions
- Footprint reduction

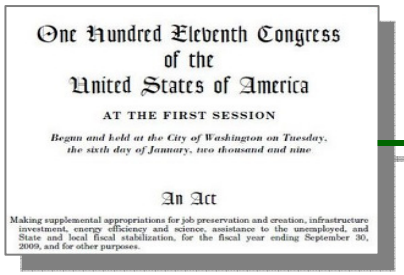
Use science and technology to optimize the efficiency of tank waste disposition

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

Alternative management approaches such as the Energy Parks Initiative



Footprint Reduction


One Hundred Eleventh Congress
of the
United States of America
AT THE FIRST SESSION
Begun and held at the City of Washington on Tuesday, the sixth day of January, two thousand and nine
An Act
Making supplemental appropriations for job preservation and creation, infrastructure investment, energy efficiency and science, assistance to the unemployed, and State and local fiscal stabilization, for the fiscal year ending September 30, 2009, and for other purposes.

Recovery Act

Economic Stimulus

Office of Environmental Management (EM)

EM Footprint Reduction, small site completions, and other investment opportunities

Jobs created

Lifecycle cost reduced

Environment protected

Footprint reduced

Clean, Diverse Energy Sources

- **Energy security**
- **Establish long-term site mission**
- **Sustainable jobs**

Energy Parks

Large tracts of land and infrastructure available

EM Environmental Management

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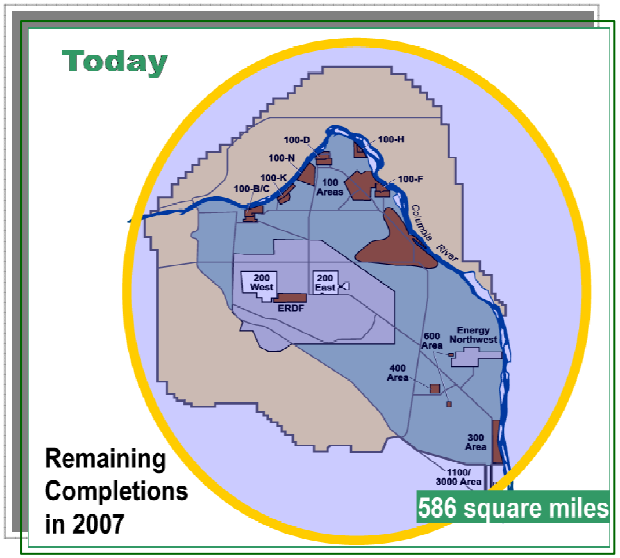
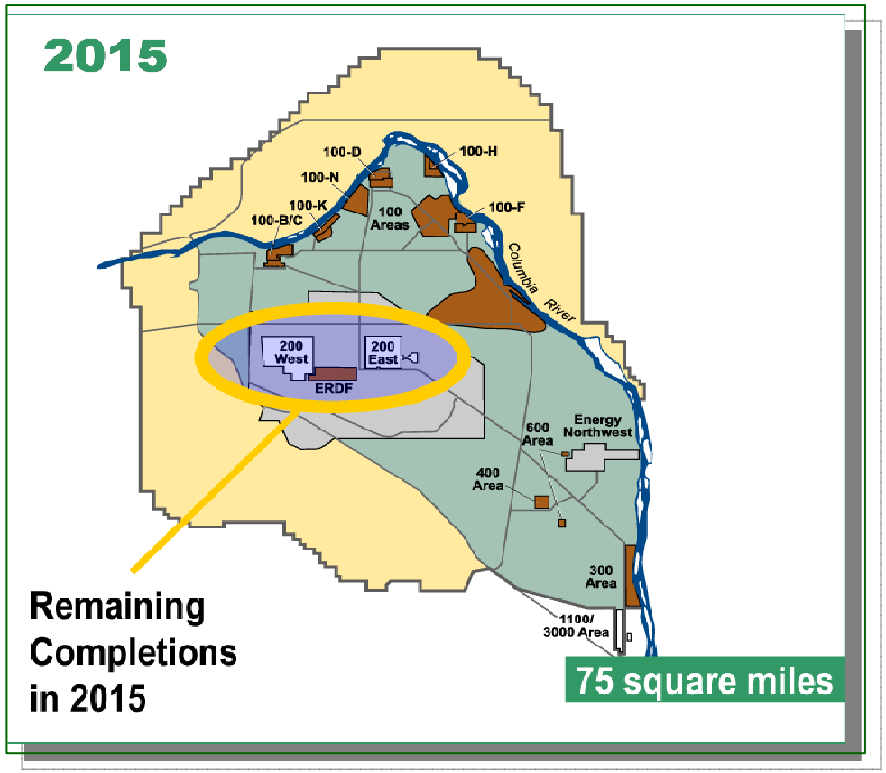
Footprint Reduction – Hanford Site



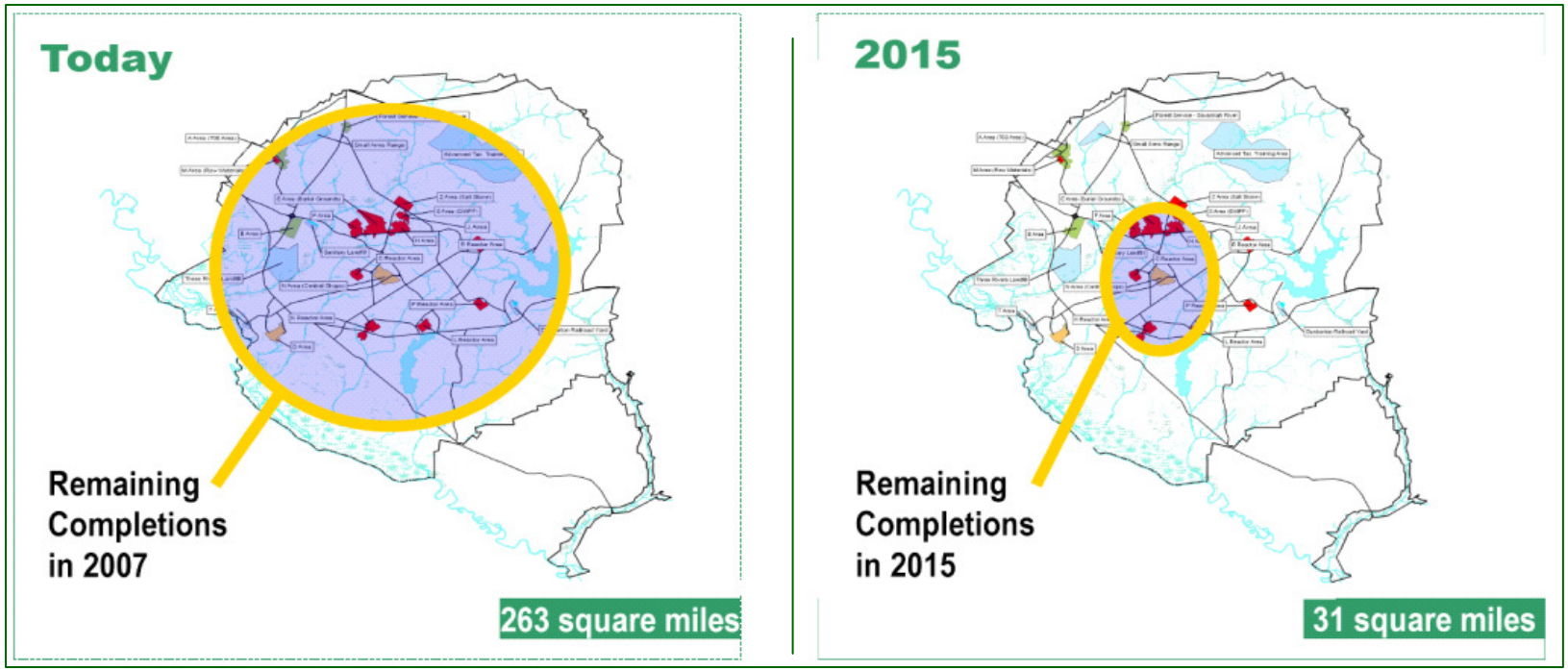
- Accelerate river corridor cleanup
- Complete D&D of the plutonium finishing plant

- Reduces environmental risk with large return on investment
- Results in roughly 90 percent reduction of the site footprint

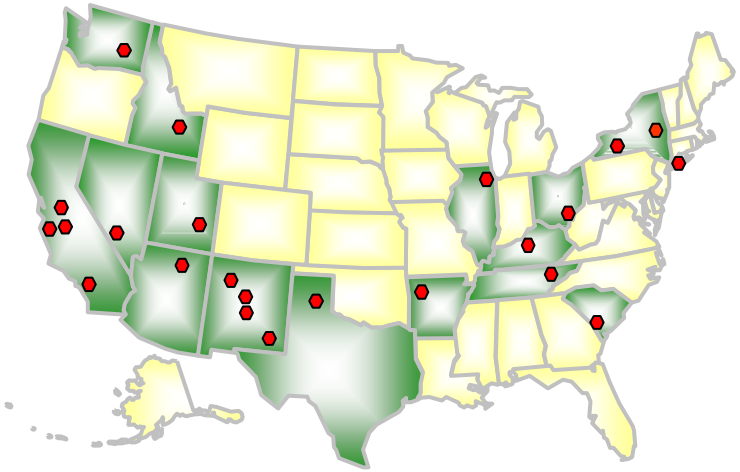


Footprint Reduction – Savannah River Site

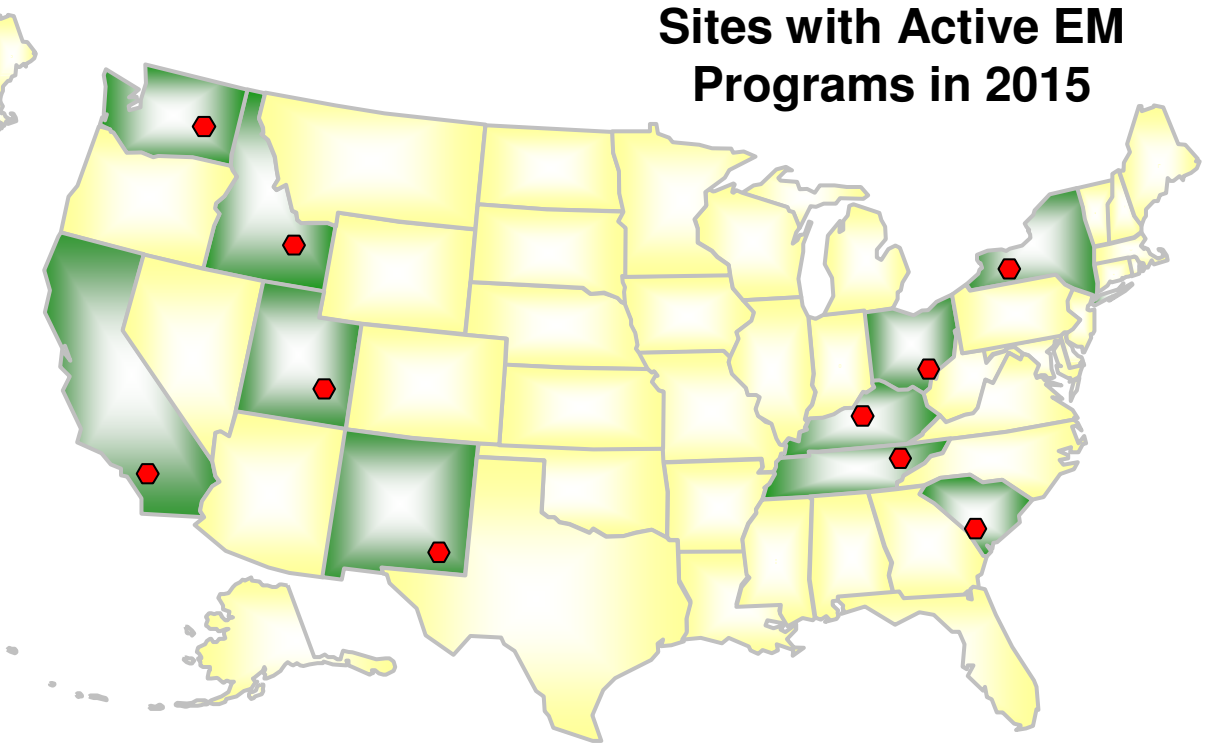
- Focus on Area Closures—soil and ground water remediation
- Accelerate entombment of production reactors
- Reduces environmental risk with large return on investment
- Results in roughly 90 percent reduction of the site footprint



Small Site Near-Term Completion



Sites with Active EM Programs in 2008



Sites with Active EM Programs in 2015

Cleanup activities at 23 sites in 15 states – to 10 sites in 10 states
Reduce EM footprint from 900 square miles to 135 square miles
Significant reduction in life-cycle cost

Reutilization of Assets/Energy Parks

EM's unique resources can be leveraged to address some of the Nation's energy security and climate change concerns

- **Energy Parks Initiative (EPI) will convert EM liabilities (contaminated sites, facilities, and materials) into assets to solve critical national energy issues**
- **EPI can demonstrate effective partnering of DOE, other Federal agencies, private industry, state and local governments, and local communities**
- **EPI can preserve and enhance economies of state and local host communities of DOE/EM sites with energy reindustrialization**

EM's Base Program Funds

Site	FY2008 Appropriations ($ K)	FY2009 Omnibus ($ K)
Argonne National Laboratory	433	29,479
Brookhaven	15,438	8,433
Energy Technology Engineering Center	12,882	15,000
Fernald	0	2,100
Hanford	1,001,749	1,057,496
Idaho	522,838	489,239
Los Alamos National Laboratory	175,158	224,639
Miamisburg	30,032	30,574
Moab	23,734	45,699
Nevada	85,368	75,674
Oak Ridge	493,038	498,738
Office of River Protection	976,540	1,009,943
Paducah	148,211	169,922
Portsmouth	224,260	240,690

Site	FY2008 Appropriations ($ K)	FY2009 Omnibus ($ K)
Savannah River	1,286,754	1,361,479
SPRU	27,334	18,000
SLAC National Accelerator Laboratory	7,846	4,883
Waste Isolation Pilot Plant	239,467	236,785
West Valley Demonstration Project	66,485	66,900
Other Sites	36,365	4,630
Completed Sites Administration and Support	12,915	14,309
Program Direction	306,941	309,807
Program Support	32,844	33,930
Uranium Thorium Reimbursement	19,818	10,000
Technology Development & Deployment	20,600	32,320
Congressionally Directed Activities	17,195	22,665
Total	5,756,869	5,991,572

EM's Recovery Act Funds

Site	Funding
Washington,	
➢ Office of River Protection	$326 million
➢ Hanford	$1.635 billion
South Carolina, Savannah River Site	$1.615 billion
Tennessee, Oak Ridge National Laboratory,	$755 million
Idaho, Idaho National Laboratory	$468 million
New Mexico	
➢ Carlsbad	$172 million
➢ Los Alamos National Laboratory	$212 million
New York	
➢ Brookhaven National Laboratory	$42 million
➢ Separations Process Research Unit	$32 million
➢ West Valley Demonstration Project	$74 million
Ohio	
➢ Miamisburg/Mound	$20 million
➢ Portsmouth	$118 million

Site	Funding
Utah, Moab	$108 million
Illinois Argonne National Laboratory,	$99 million
Kentucky, Paducah	$79 million
California	
➢ Energy Technology Engineering Center	$54 million
➢ SLAC National Accelerator Laboratory	$8 million
Nevada, Nevada Test Site	$44 million
Multiple States	
➢ Uranium Thorium Payments	$69 million
Management and Oversight Reserve	$70 million

American Recovery and Reinvestment Act of 2009 (Recovery Act)

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An Act

Making supplemental appropriations for job preservation and creation, infrastructure investment, energy efficiency and science, assistance to the unemployed, and State and local fiscal stabilization, for the fiscal year ending September 30, 2009, and for other purposes.

- Signed into law on Feb 17, 2009
- Unprecedented Congressional action
- Priority at highest Federal levels
  - **President**
  - **Congress**
  - **Secretary of Energy**
  - **Assistant Secretary for Environmental Management**
- Unprecedented transparency and accountability
- $6 billion in *additional* funding for EM to be used by 2011

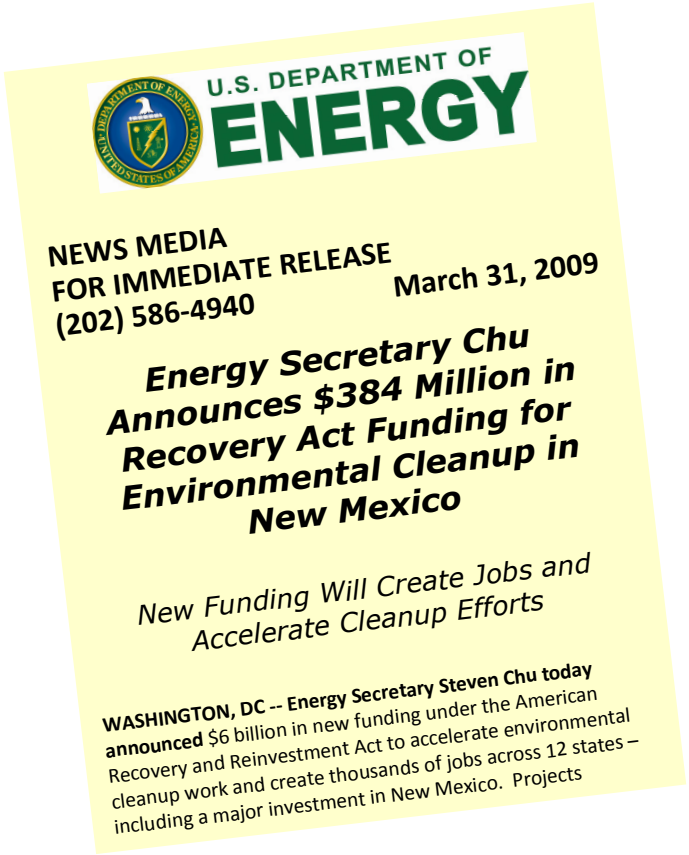
Recovery Act: EM's Approach

- Focusing on "shovel ready" projects contributing to footprint reduction and small site completions
- Requiring rapid deployment of resources with transparency of activities and accountability for results
- Developing dedicated EM project team
  - Safety/Operational Readiness
  - Project Management
  - Budget
  - Contracting
  - Regulatory
  - Communications

YOUR MONEY *at* WORK
RECOVERY.GOV

Contributes to jobs creation, EM life cycle cost savings, and energy parks

Recovery Act Status



U.S. DEPARTMENT OF ENERGY

NEWS MEDIA
FOR IMMEDIATE RELEASE
(202) 586-4940

March 31, 2009

Energy Secretary Chu Announces $384 Million in Recovery Act Funding for Environmental Cleanup in New Mexico

New Funding Will Create Jobs and Accelerate Cleanup Efforts

WASHINGTON, DC -- Energy Secretary Steven Chu today announced $6 billion in new funding under the American Recovery and Reinvestment Act to accelerate environmental cleanup work and create thousands of jobs across 12 states – including a major investment in New Mexico. Projects

- Opportunities at 17 sites in 12 states (totaling $6B through FY 2011)
  - **Recovery Act proposals developed by sites with site priorities in mind**
  - **Flexibility in work scope, but first and foremost, Recovery Act funds are about job creation**
- EM Recovery Act plans announced on March 31, 2009
- Funds released to sites in early April 2009

The EM Recovery Act Program

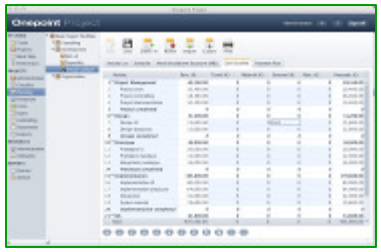
Demonstrated Results

Rocky Flats Cleanup


Fernald Cleanup


- Extraordinary opportunity for EM to achieve new success—***Recovery Act funding entrusted to EM because of demonstrated results***
- Funds intended to create near-term environmental cleanup jobs, with lasting economic benefits
- Recovery Act Program Office being established in EM to support Recovery Act success

Recovery Act Implementation Principles



To achieve our goals of job creation and footprint reduction as quickly as possible, we are evaluating site cleanup plans using five guiding principles:

1. **Validated cost and schedule baselines are in place**
2. **Contracts are in place**
3. **Regulatory requirements are agreed to and achievable**
4. **Technologies are proven and readily available**
5. **Significant accomplishments can be achieved by the end of FY 2011**

Recovery Act Project Priorities

- Scope that can most readily be accelerated to take advantage of Recovery Act funds
  - **Soil and groundwater remediation**
  - **Radioactive waste disposition (e.g., TRU waste and Low Level Waste)**
  - **Facility decommissioning**
- Site closure and EM completion
- Reduce the EM footprint
  - **Across the country**
  - **Within a site**

Recovery Act: Potential Examples of Site Performance Measures

Jobs Saved

Waste Shipped

- Cubic Meters of Radioactive Waste Disposed
- Acres of Land Remediated
- Buildings Demolished
- Facility Square Footage Deactivated and Decommissioned
- Gallons of Water Treated
- Jobs Created

Contacts

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Recovery Act Program Office
202-586-2083

Mission

The Environmental Management Advisory Board (EMAB) provides independent and external advice, information, and recommendations to the Assistant Secretary for Environmental Management (EM) on corporate issues relating to accelerated site clean-up and risk reduction.

Current Priorities for EMAB Focus

- Strategic Planning
- Regulatory Compliance
- Acquisition and Project Management
- Human Capital Initiatives
- Communications
- Quality Assurance

The Challenge: Continuing Progress on Overall EM Program

- 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