

Department of Energy
Office of Environmental Management

Historically Black Colleges and Universities
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 **EM Environmental Management**
safety ✦ performance ✦ cleanup ✦ closure

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 (TRU) and mixed/low-level waste disposition
- Soil and groundwater remediation
- Excess facilities deactivation and decommissioning (D&D)



Goal Attainment

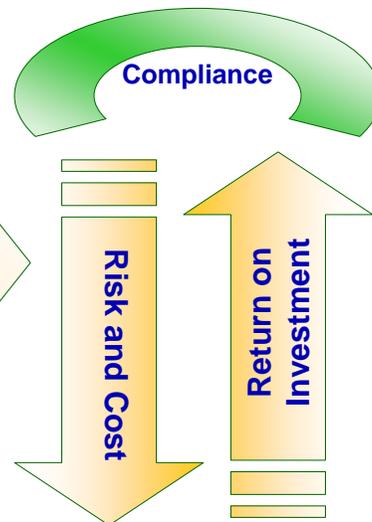
Sound business practices

- Near term completions
- Footprint reduction

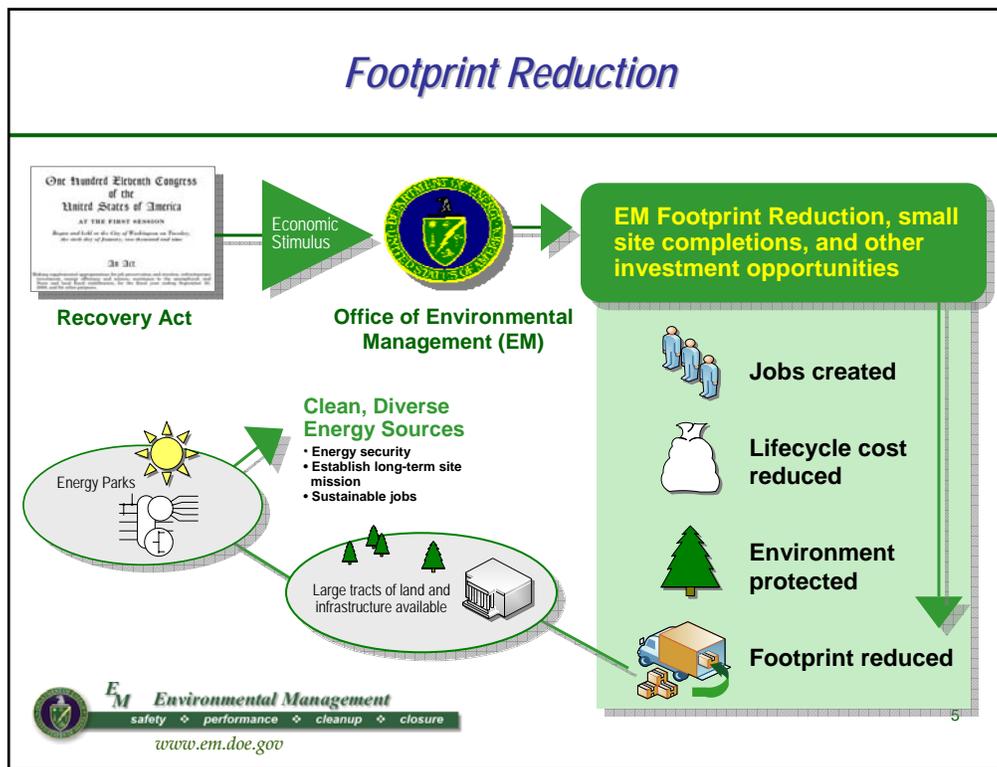
Use science and technology to optimize the efficiency of tank waste disposition

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

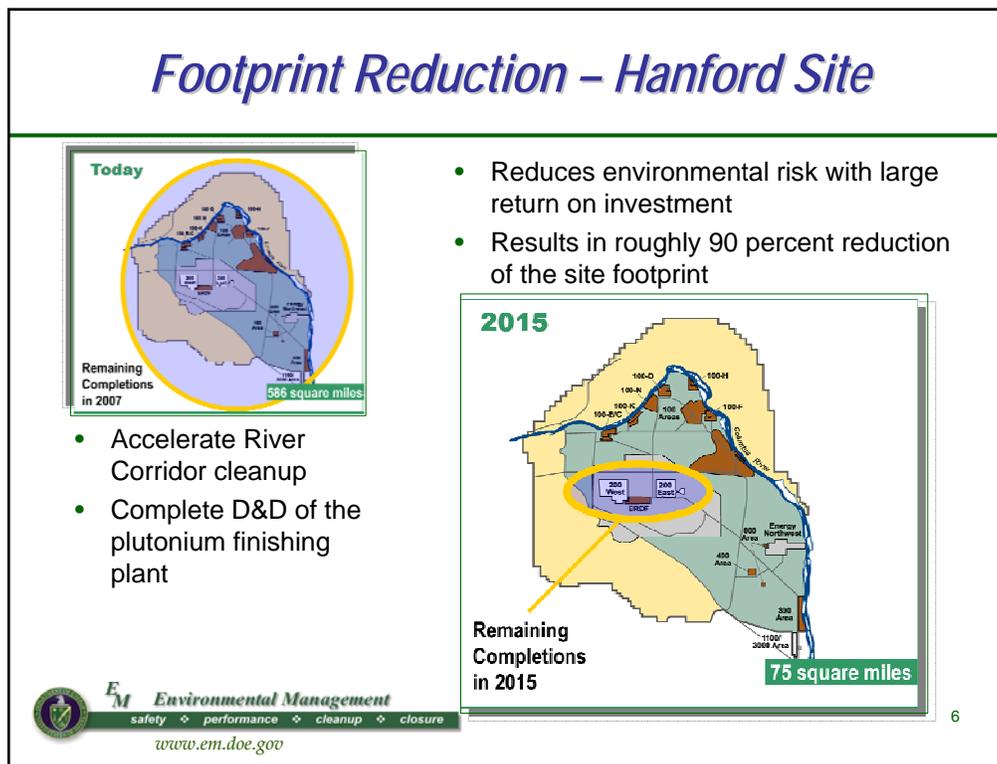
Alternative management approaches such as the Energy Parks Initiative



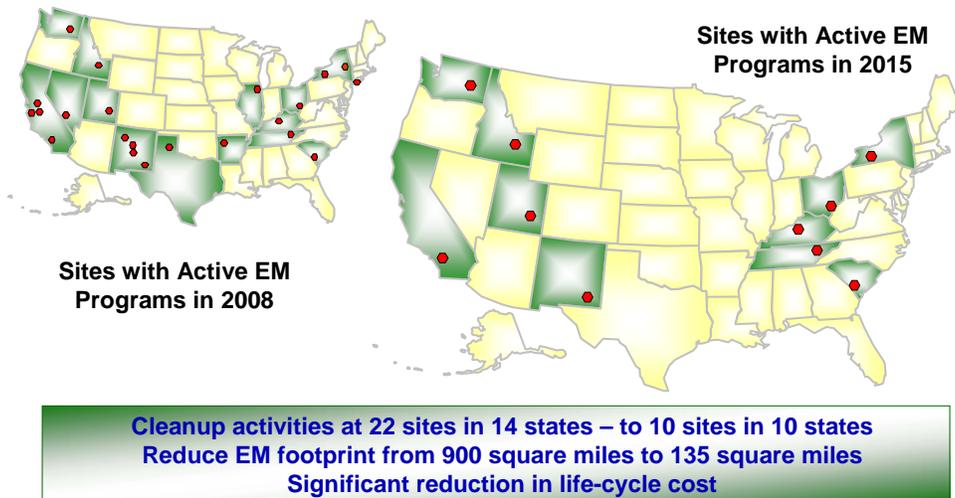
Footprint Reduction



Footprint Reduction – Hanford Site



Small Site Near-Term Completion



Reutilization of Assets/Energy Parks



- 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

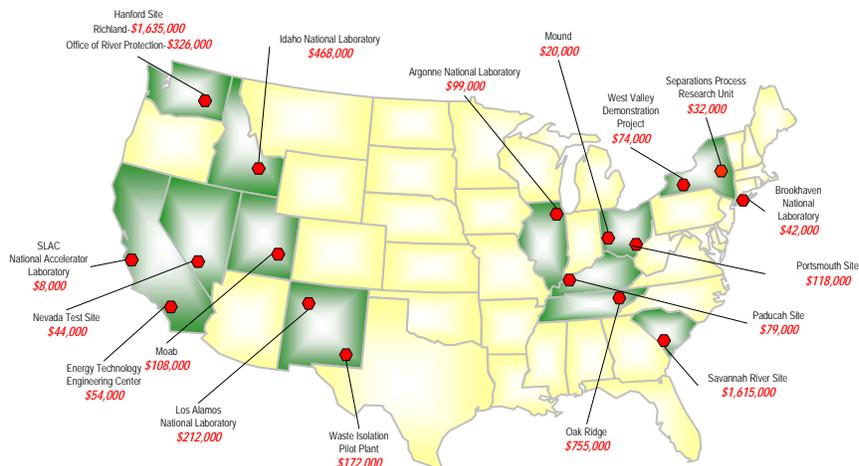
EM's unique resources can be leveraged to address some of the Nation's energy security and climate change concerns

American Recovery and Reinvestment Act



- \$6 billion in Recovery Act funding
- Scope that can most readily be 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
 - Existing contract vehicles
- Focus on EM completion and footprint reduction
- Recovery Act funding will accelerate approximately 70 compliance milestones

\$6 Billion— Where Is the Money Going *(\$ in thousands)*



12 States, 17 Sites
 Uranium/Thorium \$69 million
 Management & Oversight \$70 million

Project Management— Oversight & Accountability

Safety is the #1 priority for all EM Recovery Act projects.

- Fully implement DOE Order 413.3A
- Phased release of funding based on performance
 - Integrates project, contract and funds management
- Ensure projects stay on schedule and within cost
- Conduct regular reviews to track and monitor performance
- On-site Headquarters representatives will closely observe project performance
- Maintain regular communications with regulators, Tribal Nations and stakeholders
- External oversight reviews by the IG and GAO

American Recovery: The First 100 Days “Up and Running...”

Washington State (Hanford)

- Accelerating retrieval of transuranic waste drums and trench boxes
- Excavated 124,000 of 375,000 cubic yards of dirt to increase capacity of the Environmental Restoration Disposal Facility
- Groundwater projects expansion underway



Retrieval of waste drums at Hanford contain low-level, mixed low-level, and TRU waste.



The first trainload of uranium tailings left Moab on April 20, marking the beginning of a massive cleanup effort.

Utah (Moab Mill Tailings Site)

- Relocation of the world's largest uranium mill tailings pile (16 million tons) has begun

American Recovery: The First 100 Days "Up and Running..."

South Carolina (Savannah River Site)

- First 2 Remote-Handled transuranic (TRU) waste shipments prepared for transport
- Achieved 1,000th shipment milestone for TRU waste to the Waste Isolation Pilot Plant

Tennessee (Oak Ridge)

- Started training 2nd shift TRU operations
- Began clean up of Y-12 scrap yard

Idaho (Idaho National Lab)

- Accelerated shipment of mixed low-level waste from Advanced Mixed Waste Treatment Plant
- 3000-sq ft High Integrity Container (HIC) enclosure dismantled and disposed



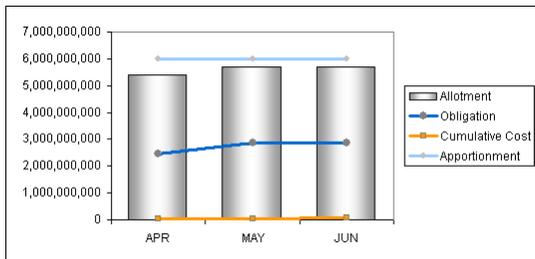
This old scrap yard at Y-12 will be one of the first cleanup projects to be done with stimulus money in Oak Ridge.



The HIC enclosure was the first decontamination and decommissioning project completed under the Recovery Act.

Monthly Metrics for Recovery Act Projects

Apportionment, Allotment, Obligation and Cumulative Cost



	APR	MAY	JUN
Apportionment	6,000,000,000	6,000,000,000	6,000,000,000
Allotment	5,413,685,000	5,705,625,000	5,705,625,000
Obligation	2,451,737,784	2,878,782,348	2,881,019,202
Cumulative Cost	25,465,857	55,032,084	79,016,507

Metrics	Target for Completion in Sept 2011
Jobs Saved and Created	13,000 jobs
CH TRU Removed from Site	4,600 m3
RH TRU Removed from Site	25 m3
Area of Buildings Demolished	3,240,000 ft2
Number of Buildings Demolished	238
LLW Disposed	26,800 m3
Contaminated Soil Removed	55,000 yd3
Number of Waste Sites Remediated	82
Tailings Disposed	1.9 million tons

Preliminary targets based on information provided by sites in the Project Operating Plans

More than 3,700 Jobs Created and Saved Nationwide

	Applicants	New Jobs	Saved Jobs	Total
Argonne (IL)	TBD	15	4	19
Brookhaven (NY)	TBD	34	45	79
ETEC (CA)	1	1	2	3
Hanford-ORP (WA)	6,393	150	56	206
Hanford-Richland (WA)	9,900	775	300	1,075
Idaho (ID)	4,567	168	240	408
Moab (UT)	1,747	42	0	42
Nevada (NV)	21	9	6	15
Oak Ridge (TN)	6,260	261	6	267
Paducah (KY)	1,186	15	0	15
Portsmouth (OH)	1,370	42	8	50
Savannah River (SC)	10,300	612	798	1,410
SLAC (CA)	85	1	19	20
West Valley (NY)	1,128	71	0	71
WIPP (NM)	79	43	10	53
TOTALS	43,057	2,239	1,494	3,733



Applicants at a Hanford Job Fair



New employees complete mandatory SRS safety training

3,700 Jobs Created and Saved to Date

Cleanup Work Requires All Types of Skills

DOE Headquarters

- Project Managers
- Contracting Specialists
- Project Engineers
- Chemical Engineers
- Safety and Quality Assurance Specialists
- Budget
- Administrative Assistants
- Strategic Planners



Heavy equipment operators remove stockpile dirt to further develop the Environmental Restoration Disposal Facility at the Hanford Site in Richland, Washington

Site Field Offices

- Project Managers
- Cost Estimators
- Schedulers
- Construction Engineers
- Heavy Equipment Operators
- Radiological Technologists
- Nuclear Safety Engineers
- Quality Assurance/Quality Control Engineers
- Truck Drivers
- Health Physics Technicians
- Earth Drillers
- Environmental Engineers
- Nuclear Waste Processing Operators
- Geologists

Small Business Strategy

- Ambitious goals to maximize inclusion of :
 - Small Business
 - Small Disadvantaged Business
 - Woman-owned Small Business
 - HUB-Zone Small Business
 - Service-Disabled Veteran-Owned Small Business

Recovery Act Summary

- EM Recovery Act up and running
- Thousands of jobs created and preserved
- Nearly all funds allocated to sites
- Billions of dollars obligated to contracts
- Project management systems are in place
- Negotiating contract modifications
- Monitoring project execution and performance
- Continuous engagement with stakeholders and regulators

Find Out More

EM Recovery Act Program Office

Website

www.em.doe.gov/emrecovery

Email

emrecovery@em.doe.gov

Phone

202-586-2083

DOE Recovery Act Clearinghouse

Website

RecoveryClearinghouse.energy.gov

Email

RecoveryClearinghouse@hq.doe.gov

Phone

1-888-DOE-RCVY

Graduating Students and New Engineers Opportunities at DOE



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DOE-EM Workforce Challenges

- Aging workforce
- Continued growth in mission-related work
- Filling gaps in different technical and functional disciplines
- Recruiting and retaining expertise at certain locations

Talent Acquisition Vision

To execute a recruitment strategy that utilizes a diverse assortment of federal recruitment tools and hiring authorities that allows for maximum management flexibility and discretion when laying EM's "pipeline" of future talent/leadership and creating longest term possible opportunities for the transfer of knowledge as we build and sustain a "best in class" workforce.

DOE Opportunities

- EM Professional Development Corps
- Student employment programs
 - Student Career Experience Program
 - Student Temporary Employment Program
 - DOE Scholars Program
 - DOE Minority Education Institution Student Program
 - Student Volunteer Program



EM Professional Development Corps

- Mentoring Program
 - Structured two-year developmental program
 - On-the-job-training
 - Formal classroom instruction
- Rotational assignments
 - EM Headquarters
 - EM field and DOE sites
 - DOE laboratories
 - Other DOE offices
 - DOE contractors
- Opportunity for follow-on appointments at DOE



Seeking Academic Disciplines

Bachelor, Graduate, or Postdoctoral Degree from an accredited college or university

Technical

- Chemical Engineering
- Civil/Structural Engineering
- Electrical Engineering
- Environmental Engineering
- Industrial Engineering
- Mechanical Engineering
- Nuclear Engineering
- Environmental Science
- Fire Protection
- Occupational Safety and Health
- Physical Science
- Information Technology
- Other disciplines that support our program

Non-Technical

- Business Administration/Management
- Finance
- Accounting
- Political Science
- Law
- Public Administration
- Human Resources



Research Opportunities at DOE Labs/Facilities

- Education Programs at DOE Labs and Facilities
- Argonne Nuclear Science Educational Programs
- Fossil Energy-Mickey Leland Fellowship Program
- Fossil Energy Technical Career Intern Program
- Nuclear Energy Summer Internship Program
- Oak Ridge Institute for Science Education
- Science Undergraduate Laboratory Internship
- Science Community College Institute
- Science Pre-Service Future Teacher Program
- Science Workforce Development Programs for Teachers and Scientists
- Science Biological and Environmental Fellowships and Education Programs
- Princeton High Energy Physics Education Programs

<http://www.energy.gov/scholarships&internships.htm>

Career Opportunities

- EM Professional Development Corps

Contact Andre Fordham
at empdc@hq.doe.gov or (202) 586-8568
<http://empdc.apps.em.doe.gov/>

- DOE Career Intern Program

<http://www.usajobs.gov/>

- Other Government Jobs

<http://www.usajobs.gov/>

