

American Recovery and Environmental Restoration

Meeting the Challenge

Progress and Accountability in Implementing the American Recovery and Reinvestment Act

Office of Environmental Management

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August 25, 2009



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure



Secretary Chu's Key Objectives for the Recovery Act



- Start projects quickly
- Ensure projects have lasting value
- Provide public with unprecedented transparency
- Make a significant down payment on the Nation's energy and environmental future



EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

EM has received \$6 billion in Recovery Act Funding



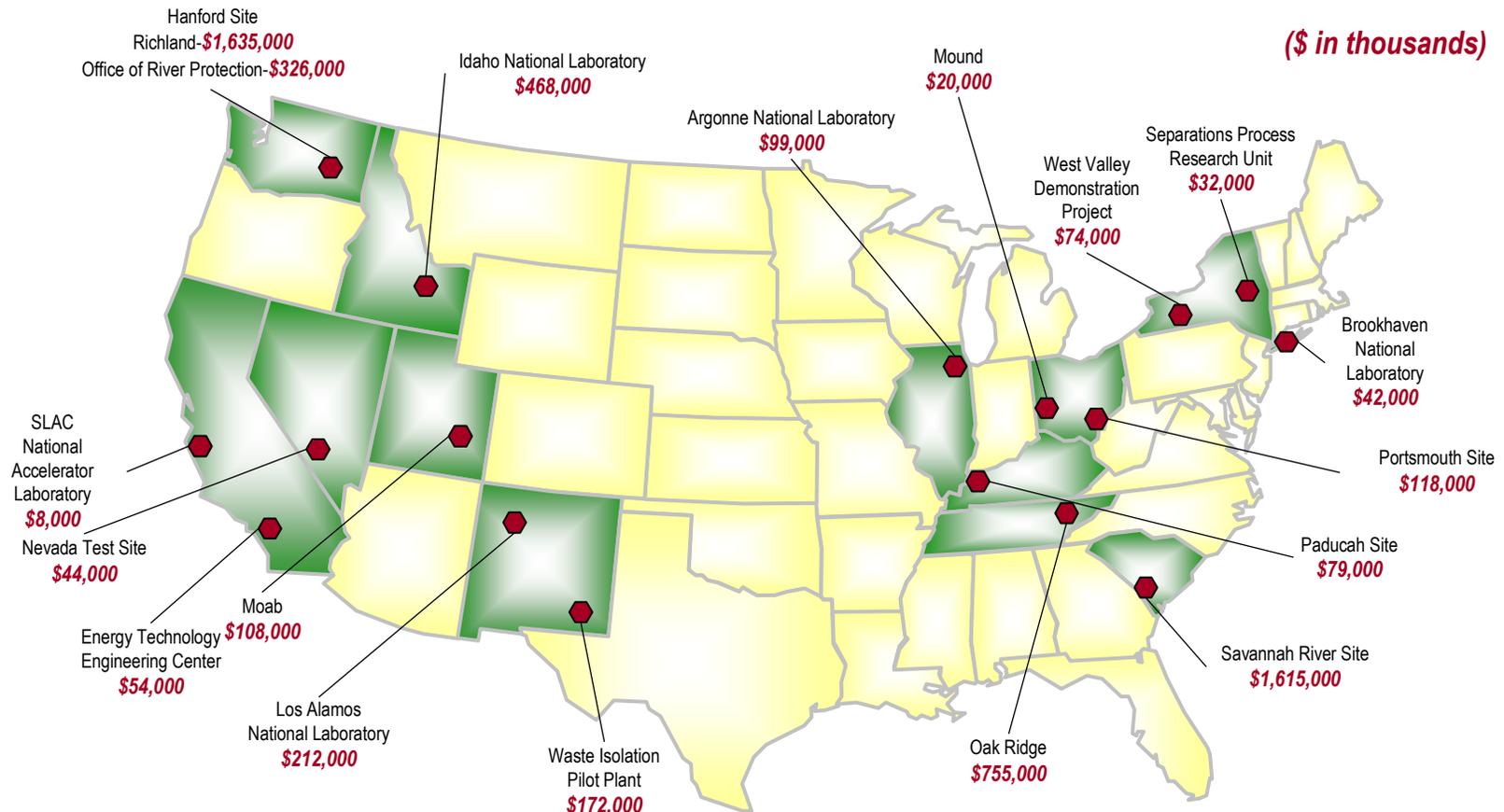
- Directed towards existing scope that can most readily be accelerated
 - Soil and groundwater remediation
 - Radioactive solid waste disposition
 - Facility decontamination & decommissioning
- “Shovel-ready” projects
 - Fully-defined cost, scope and schedule
 - Established regulatory framework
 - Proven technology
 - Proven performance
 - Existing contract vehicles
- Focus on EM completion and footprint reduction
- Recovery Act funding will accelerate approximately 70 compliance milestones



EM Environmental Management

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\$6 Billion-Making a Difference in Communities Across the Country



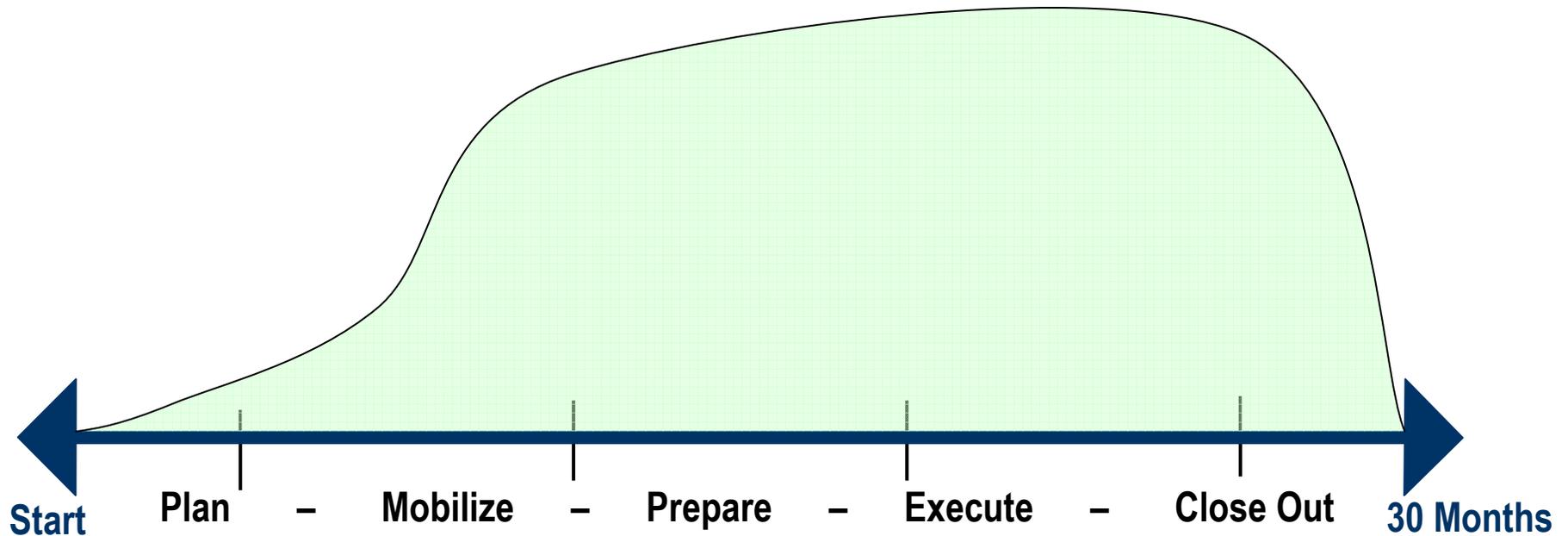
12 States, 17 Sites
Uranium/Thorium \$69 million
Management & Oversight \$70 million



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How It's Done



- Scope
- Contract
- Baseline
- Responsibility
- Authorities

- Recruit
- Hire
- Badge
- Medical
- Train
- Facilities

- Train
- Hazard Identification
- Special Gear
- Procedures

- Project Teams
- Safety Engineering
- Turn Key Pieces



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Meeting the Challenge in Getting Work Done



South Carolina (*Savannah River Site*)

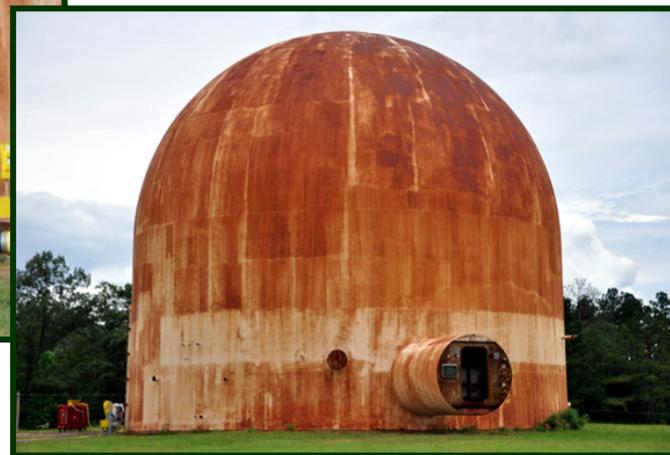
- 1 million gallons of hazardous waste from underground waste storage plants processed at the Saltstone Waste Processing Facility
- Deactivation and decommissioning (D&D) of the R Area nuclear reactor is underway



R Reactor Recovery Act workers at SRS saw fixture piping as D&D work begins.



SRS Recovery Act workers open up old test reactor to prepare it for demolition.



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Meeting the Challenge in Getting Work Done



New Mexico (*Los Alamos National Laboratory*)

- Final canister of remote-handled transuranic waste shipped to the Waste Isolation Pilot Plant, completing key Consent Order milestone required by the State of New Mexico Environmental Department



The final canister of remote-handled radioactive waste departed LANL July 2, destined for WIPP. LANL shipped 16 canisters in 1 month.

Tennessee (*Oak Ridge*)

- Removal of excess equipment and scrap metal from Y-12 Beta 4 and Alpha 5 facilities has begun in preparation for D&D

New York (*Brookhaven National Lab*)

- Cleanup of cesium contaminated soil at the former Hazardous Waste Management Facility perimeter near completion, contributing to footprint reduction

Material characterization by radiological control technicians ensures the safe handling of materials at Y-12's Alpha-5 facility.



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Meeting the Challenge in Getting Work Done



Washington State (*Hanford Site*)

- Hanford broke ground on an \$80 million groundwater treatment facility funded through the Recovery Act. The facility, to be completed in 2011, will be roughly the size of a football field.



EM Assistant Secretary Inés Triay (center) and officials with contractor CH2M HILL, DOE, the AFL-CIO, EPA, and Washington State break ground on an \$80 million Recovery Act project at the Hanford on July 23.

Utah (*Moab*)

- 160,000 tons of uranium mill tailings were shipped between April & July 2009. Multiple train shipments per day will accelerate cleanup of Moab's enormous uranium mill tailings pile.



A gantry crane loads uranium mill tailings onto a railcar at Moab.



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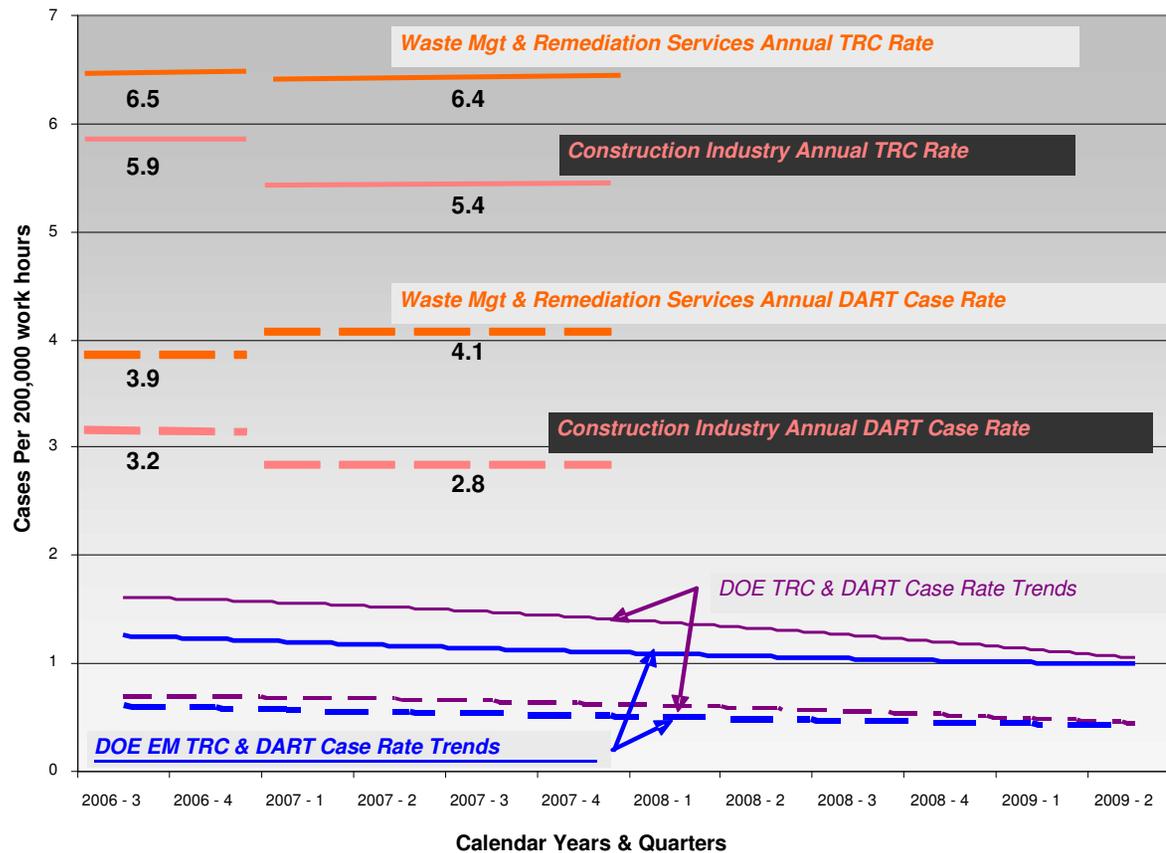
Environmental Management Safety Performance



- Implementation of ISMS across the EM Complex.
- EM injury improved from 2004.
- EM rates below average DOE-wide rates also those for similar private sector work.
- EM's performance peaked in 2008.
- EM-1 guidance in 2008 intended to refocus attention on safety performance.
- Current performance remains level in 2009 to date.



DOE/EM/Industry Standards TRC & DART Case Comparisons



DART Case: Lost Work Days
Cases - Days Away from work,
Restricted or on job Transfer
(DART) case rate per 200,000
work hours.

TRC: Occupational Injury Safety –
Total Recordable Case (TRC) rate
per 200,000 work hours.

*This DOE data is collected in the
Computerized Accident & Injury
Reporting System (CAIRS). Data as
of July 9, 2009.

** Industry rates taken from NAICS
code 23 and 562 of the Bureau of
Labor Statistics 2007 Industry Injury
and Illness Data

0.85
0.86
0.35
0.32

**Latest
Reported
Quarterly
Rate**

ARRA Increases Several Risk Factors



- Additional workload means increased new hires.
- Flowdown of safety requirements into sub-contracts and implementing processes.
- Unfamiliarity with expectations for working on DOE site.
- Increased onsite traffic (vehicular safety).
- More heavy equipment and material handling.
- Heavily weighted toward “routine” work, which has been a challenge.



Additional Management Challenges



- Staffing pressures for critical positions such as shift managers, trainers, SMEs, etc.
- Need for increased oversight:
 - Contractors, Field Offices, and HQ.
- Increased pace of work.
- Implied schedule pressure.



Early Aggressive Direction



- EM-1 Memo of 2/25 on *Safety of Work Created Under the ARRA*
 - Safety must be integral and robust from the outset.
 - Poor safety performance neither acceptable nor tolerated.
 - Federal oversight resource planning.



Early Aggressive Direction



- EM-1 Memo of 2/25:
 - Contractor Readiness
 - ISM systems & safety management programs cover ARRA work.
 - Safety & QA requirements included in sub-tier or IDIQ contracts.
 - New workers are fully trained.
 - Contractors provide rigorous oversight of sub-tier contractor work and provide mentoring where needed.
 - Nuclear/radiological material or waste can be safely packaged and transported.
 - Safety performance metrics for ARRA work is tracked and reported separately.



Early Aggressive Direction



- EM-1 Memo of 2/25
 - Contractor Activity Readiness Self-Assessments to be completed prior to full scope implementation.
 - EM targeted reviews of Contractor Self-Assessments and Independent Onsite Assessments (SRS, RL, ORP examples).



Nuclear Safety Requirements



- For Hazard Category 2 or 3 Nuclear Facilities/Activities.
- 10 CFR 830 compliant Authorization Bases or properly exempted/compensatory coverage
 - Scope specific Work Planning/Control documents prepared.
 - Formal cross-program agreements.



Rigorous Oversight



- Coordinated ARRA/EM-HQ Safety Oversight
 - Active contractor assurance for safety performance.
 - Existing site oversight coverage (Facility Representatives technical resources).
 - Active Headquarters field oversight
 - Recovery Act Readiness Evaluation (RARE).
 - HQ ARRA Site Representatives.



Communications with Stakeholders



- Monthly Reporting through existing EM Processes
 - DOE Field Staff.
 - Site Contractor Participation.
- EM ARRA Safety Initiatives communicated with DOE Enforcement Coordinators.
- Regular communication with Defense Nuclear Facilities Safety Board (DNFSB) staff.
- Safety addressed in response to the Inspector General ongoing *Audit of Environmental Management's Implementation of the ARRA*.
- Safety performance among the elements of the GAO audit of EM ARRA Implementation.



Reporting ARRA Safety Performance



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Lessons Learned to Date



- DOE Corporate Lessons Learned database now has coding to allow identification of lessons learned as ARRA-related; need to use early and often to share ARRA operating experience.
- Federal and Contractor Oversight needs to be incorporated into existing Integrated Oversight Schedules.
- Initial ARRA ORPS Safety Performance:
 - EM-ID--BBWI-AMWTF-2009-0010 - Deficient Curtain Trailer Component Strikes Operator.
 - EM-ID--BBWI-AMWTF-2009-0011 - Near Miss and Other Vehicle Events Causes Management Concern.



Lessons Learned to Date



- EM-ID--CWI-BIC-2009-0002 - ATR Complex D&D - Suspect Counterfeit U-Bolt Clamps Identified on Mobile Cranes.
- EM-ID--CWI-ICPWM-2009-0002 - Potential Inadequacy of the Documented Safety Analysis Declared on Hot Fuel Examination Facility (HFEF-5) Waste Containers (USQ).
- EM-ID--CWI-INLPROGM-2009-0001 - Unclear Roles and Responsibilities Results in Unapproved Hoisting and Rigging Configuration & Less-Than-Adequate Step Back.
- EM-SR--SRNS-CPWM-2009-0005 - Failure to Properly Administer Lockout/Tagout.
- ARRA work needs to be subjected to the same scrutiny (if not more) as our regular work with regard to work control, conduct of ops, etc.



Safety Summary



EM Recovery Act is rising to the challenge!

- EM Safety Performance continues to be a priority
- ARRA introduces additional risk and management challenges
- Early aggressive direction key to addressing these
- Rigorous Oversight in place and being performed
- Communications established with key stakeholders
- Events will occur the key is to address these quickly and move forward

