WM Symposia 2011
Pursuit of High Performance

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U.S. Department of Energy
EM’s Journey to Excellence

1. Complete the three major tank waste treatment construction projects within the approved baselines
2. Reduce the life-cycle costs and accelerate the cleanup of the Cold War environmental legacy
3. Complete disposition of 90 percent of the legacy transuranic waste by the end of 2015
4. Reduce the EM legacy footprint by 40 percent by the end of 2011, leading to approximately 90 percent reduction by 2015
5. Improve safety, security and quality assurance towards a goal of zero accidents, incidents, and defects
6. Improve contract and project management with the objective of delivering results on time and within cost
7. Achieve excellence in management and leadership, making EM one of the best places to work in the Federal Government
Goal 5:
Improve safety, security and quality

DOE & EM Safety Compared To Industry Performance

DART Case: Days Restricted or on job Transfer; TRC: Total Recordable Case

<table>
<thead>
<tr>
<th>Category</th>
<th>TRC (Cases)</th>
<th>DART (Cases)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Mgt &amp; Remediation Services 2009 Rates</td>
<td>5.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Construction Industry 2009 Rates</td>
<td>4.3</td>
<td>2.3</td>
</tr>
<tr>
<td>DOE Rates - ARRA Period (June 2009-Dec 2010)</td>
<td>1.16</td>
<td>0.5</td>
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<tr>
<td>DOE EM Rates - ARRA Period (June 2009-Dec 2010)</td>
<td>0.88</td>
<td>0.4</td>
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</table>
EM Safety Performance is Improving
What is Working? What’s Next?

- Good safety culture
- Structured work planning and execution
- Self-assessments and oversight
- Current focus
  - Work planning and execution
  - Maintain safety performance metrics
  - Effective Quality Assurance Program
  - EM risk-informed decision-making policy
- Integrating safety early and throughout the design process.
Improving Safety Means Improving QA

**EM Quality Concerns**

- **EM Identified the need to rebuild our QA Program**
- **EM Identified the lack of qualified vendors for nuclear activities**
- **EM identified additional initiatives to help address current QA concerns**

**EM Response to Resolve the Quality Issue**

- Began a QA Initiative in 2007
- Developed the QA program and distributed to our sites in 2008
- Implemented the QA program at field and headquarters offices
- Currently engaged in the validation and verification of the program
- Sponsorship of DOE and Commercial Vendor Outreach Events
- Sponsorship of Quality Training Sessions for Vendors (e.g., Commercial Grade Dedication, NQA-1)
- Sponsorship of a quality assurance summit to exchange ideas with vendors
- Establishment of a Corporate QA Board (senior federal and contractor advisors)
- Implementation of standard contract language associated with QA
- Application of a graded approach to implementing quality requirements
- Acquisition of QA/QC resources for EM construction projects
Goal 6:
Improve Contract and Project Management

*Improve contract and project management with the objective of delivering results on time and within cost*

"In particular, we note EM’s progress on hiring and training federal contracting and project personnel, as well as the development of alternative staffing arrangements to supplement EM employees’ technical expertise with experts from the U.S. Army Corps of Engineers and contractors from DOE national laboratories."

*GAO High-Risk Series: An Update – February 2011*

“The objective of our efforts to improve contract and project management is to *increase our efficiency and effectiveness* so that we deliver the *best performance for the taxpayers* . . . As we continue to complete projects on time and on budget, we are confident the GAO will see that our efforts are effective and sustainable.” – Assistant Secretary Triay

*EM Update – www.em.doe.gov*
Building Capacity

- Deputy FPDs from the Army Corps of Engineers
- National Laboratories
- Training and Certification
- Engaging union and industry leaders
Monitoring and Validating Performance

Current Portfolio Performance
✓ CPI
  ▪ 49 ($21,709.7 M) of 53 ($22,009.9 M) Projects have a CPI above 0.90
✓ SPI
  ▪ 51 ($21,846.5 M) of 53 ($22,009.9 M) Projects have a SPI above 0.90

Current Performance of Liquid Tank Waste Construction Projects:

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>CPIcum</th>
<th>SPIcum</th>
<th>TPC</th>
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</thead>
<tbody>
<tr>
<td>WASTE TREATMENT PLANT</td>
<td>0.99</td>
<td>1.00</td>
<td>$12,263 M</td>
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<tr>
<td>SALT WASTE PROCESSING FACILITY</td>
<td>0.94</td>
<td>0.96</td>
<td>$1,339 M</td>
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<tr>
<td>SODIUM BEARING WASTE TREATMENT</td>
<td>0.93</td>
<td>0.95</td>
<td>$571 M</td>
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Independent Review/Validation
✓ Construction Project Reviews
✓ External Independent Reviews
✓ Independent Project Reviews
Striving for Greater Performance in EM Nuclear Construction Projects

- Continued partnership with USACE on Construction management and oversight
- Performing the right oversight using the right people at the right time in Vendor QA - lessons learned and partnership
- Engage labor leadership for better partnership and increased performance
- Continue Peer Reviews and rigorous risk management
- Senior leadership engagement and shared responsibility from DOE and contractors