

DOE Contract & Project Management Progress and Challenges

2017 DOE Project Management
Workshop

March 22, 2017

DOE Project and Contract Management – Progress and Challenges

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GAO's High Risk List

- Every two years at the start of a new Congress, GAO calls attention to agencies and program areas that are high risk due to their vulnerabilities to fraud, waste, abuse, and mismanagement.
- GAO has established five criteria that need to be satisfied before an agency can be removed from the high risk list.
 - **Leadership** – agency has demonstrated strong commitment and top leadership support.
 - **Capacity** – agency has the capacity (i.e., people and resources) to resolve risks.
 - **Action Plan** – agency has a corrective action plan that defines root causes and corrective measures.
 - **Monitoring** – agency has a program to monitor and independently validate the effectiveness and sustainability of corrective measures.
 - **Demonstrating Progress** – agency has demonstrated progress in implementing corrective measures and resolving high risk issues.

DOE's History on the High Risk List

- **1990** - designated DOE's contract and project management as a high-risk area because DOE's record of inadequate management and oversight of contractors has left DOE vulnerable to fraud, waste, abuse, and mismanagement. About 90 percent of DOE's budget is spent on contracts and large capital asset projects.
- **2009** - to recognize progress by Office of Science, we narrowed the high risk designation to EM and NNSA, which account for 60 percent of DOE's budget.
- **2013** - to recognize progress by EM and NNSA in managing smaller projects, we further the narrowed high risk designation to EM and NNSA major contracts and projects (with a cost of \$750 million or more).
- **2015** – emphasized continuing concerns about EM and NNSA contracts for programs and capital asset projects.
- **2017** – DOE continued strong leadership commitment and made significant progress but more time is needed to evaluate effectiveness.

2017 High Risk Designation

Criteria	February 2015	February 2017
Leadership	Met	Met
Capacity	Not Met	Not Met
Action Plan	Partially Met	Partially Met
Monitoring Effectiveness	Not Met	Partially Met
Demonstrating Progress	Not Met	Not Met

Progress Made in 2017 Update

- DOE continued to show a strong commitment and top leadership support for improving project management:
 - Strengthened the ESAAB, by changing it from an ad-hoc body to an institutionalized board
 - Created the PMRC, which includes senior DOE officials, to assess project risks, and advise ESAAB and senior leadership on cost, schedule and technical issues for projects
 - Issued two memorandums that lay out a series of changes to policies and procedures to improve project management

Progress Made in 2017 Update (cont.)

- Changes were codified in the revised project management order (Order 413.3B), including some in response to GAO recommendations:
 - Conducting a root cause analysis if a major project is expected to exceed its approved cost or schedule
 - Conducting analyses of alternatives and cost estimates in accordance with best practices
 - Ensuring designs and technologies are sufficiently mature before construction begins

Progress Made in 2017 Update (cont.)

- DOE also made significant efforts to improve its monitoring capability
 - ESAAB met 30 times during 2015-2016 after not meeting at all in 2013-2014; PMRC reviewed multiple major projects
 - Included the PMRC in Order 413.3B and created the Chief Risk Office position
 - Enhanced oversight during the commissioning phase
 - Established project assessment offices, independent of line management, which review projects at least annually

Remaining Challenges

- **Capacity** - DOE's recent reforms were generally silent on capacity issues
- In recent reports we found capacity shortfalls. For example:
 - NNSA procurement staff reported to manage \$287 million in contract spending compared vs. federal average of \$9 million
 - No training for program managers – New Program Management Improvement Accountability Act of 2016 requires establishment of a new career path for program and project managers
 - DOE faces challenges with effectiveness to protect whistleblower contractor employees

Remaining Challenges (cont.)

- **Corrective action plan** – DOE may still not understand all root causes and important elements not addressed, including:
 - Acquisition planning for its major contracts
 - Quality of enterprise-wise cost information
 - Need for program management policy
 - How new requirements will be applied to legacy projects

Remaining Challenges (ctd.)

- **Monitoring** – more time is needed to assess effectiveness
 - PMRC only serves as an advisory body – not clear how program offices implement PMRC's recommendations
 - Operations activities within EM are not reviewed by PMRC and are not covered by DOE's revised O413.3B, even though they have experienced similar problems as major projects.

Remaining Challenges (cont.)

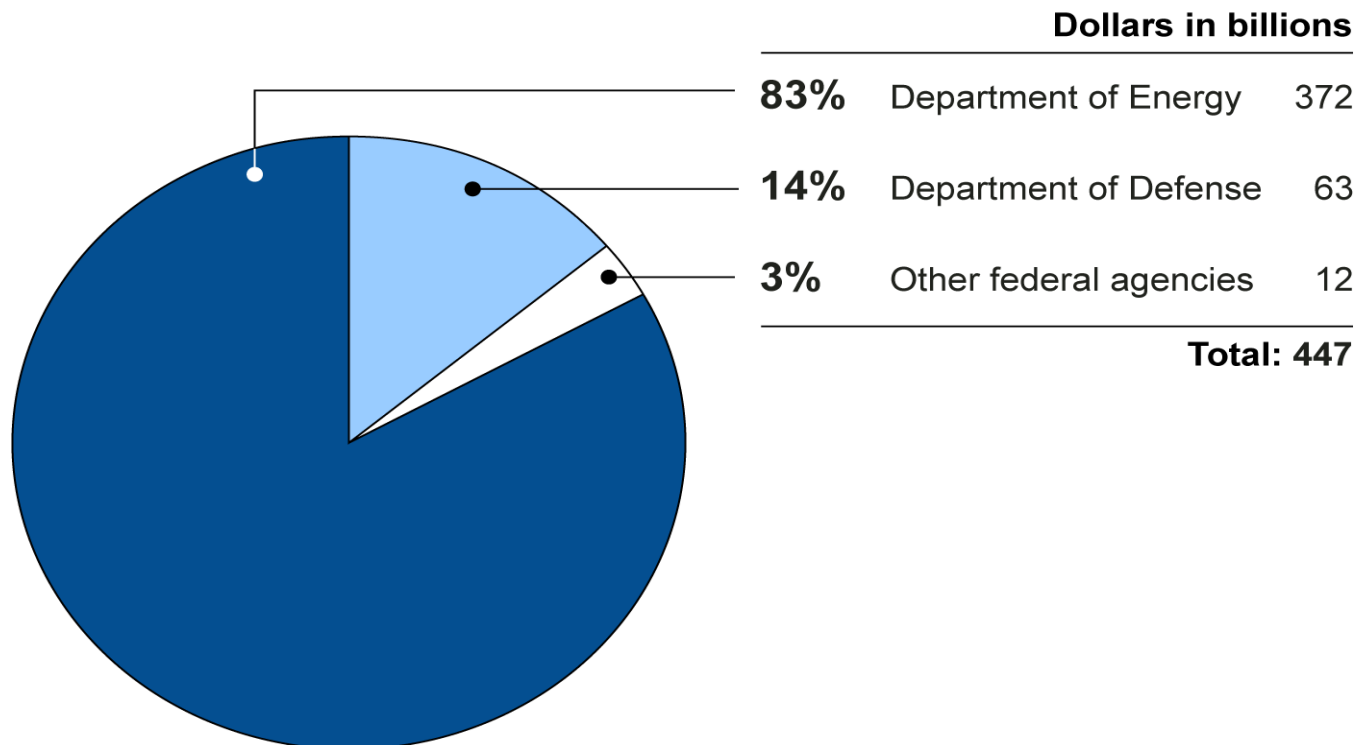
- **Demonstrating progress** – more time is needed to assess
 - Continuing challenges for major projects
 - Contract management recent work -
 - NNSA did not have established policies or guidance on using CAS to evaluate M&O contractor performance
 - DOE did not consider acquisition alternatives beyond continuing its longstanding M&O contract approach for 16 of 22 M&O contracts
 - Integrated financial management data has limited usefulness in providing meaningful information

Other – Priority Recommendations

- Life-cycle cost estimates for programs:
 - Require life-cycle cost estimates covering the full cost of programs that include both construction projects and other efforts & activities not related to construction (GAO-14-231)
 - Revise DOE directives that apply to programs to require that DOE, NNSA and its contractors develop cost estimates in accordance with best practices, including developing life-cycle cost estimates for programs (GAO-15-29)

New High-Risk Area – Federal Government’s Environmental Liability

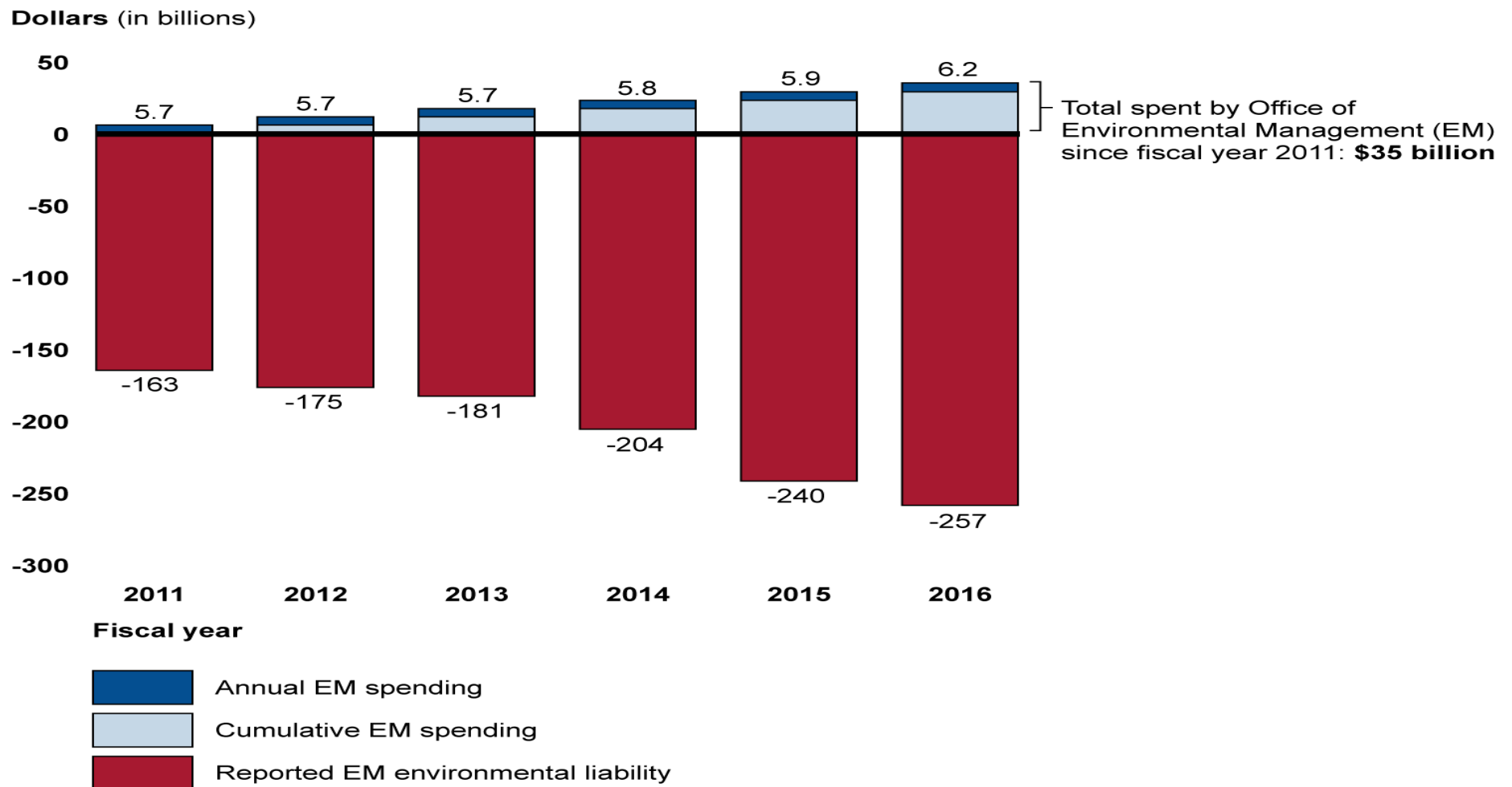
- For FY2016, the federal government’s estimated environmental liability was \$447 billion, but the ultimate cost for the cleanup is likely higher



New High-Risk Area – Federal Government’s Environmental Liability (ctd.)

- DOE’s environmental liability has roughly doubled from \$176 billion in FY1997 to an estimate of \$372 billion in FY2016
 - \$257 billion of this liability is held by EM
 - Since 1989, EM has spent over \$164 billion to retrieve, treat, and dispose of nuclear and hazardous waste
 - In the last 6 years alone, EM has spent \$35 billion, primarily to treat and dispose of nuclear and hazardous waste and construct capital asset projects to treat the waste

New High-Risk Area – Federal Government’s Environmental Liability (ctd.)



Questions?

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