#### U.S. Department of Energy

## SECOND INTERIM REPORT TO THE ENVIRONMENTAL MANAGEMENT ADVISORY BOARD

## Removal of EM Projects from the GAO High Risk List:

# Strategies for Improving the Effectiveness of Project and Contract Management in the Office of Environmental Management

Submitted by the EMAB Acquisition and Project Management Subcommittee

June 23, 2011

### **Background:**

On March 31, 2010, Dr. Inés Triay, Assistant Secretary for the U.S. Department of Energy's (DOE) Office of Environmental Management (EM), tasked the Environmental Management Advisory Board (EMAB or Board) to provide observations and recommendations regarding EM's updated strategy for reducing project and contract risks, and removing EM projects from the Government Accountability Office's (GAO) High Risk List. In response to this charge, members of the EMAB Acquisition and Project Management Subcommittee (APMS or Subcommittee) developed a Terms of Reference document outlining their specific tasks and the proposed actions needed to meet Dr. Triay's requirements. Dr. Triay approved the proposed Terms of Reference on June 4, 2010, as noted in a memorandum from Mr. Frank Marcinowski, Deputy Assistant Secretary for Technical and Regulatory Support. A report was approved by the EMAB on September 15, and submitted to Dr. Triay.

The Subcommittee was subsequently requested to undertake an assessment of how effectively EM is participating in actions being taken by various components of DOE in executing the project management Corrective Action Plan for GAO and the Office of Management and Budget (OMB), which has a goal of removing DOE EM projects from the GAO's "High Risk" projects listing in the Federal Government. The Subcommittee was further requested to identify any additional strategies or tools which may be of value in achieving that goal.

As a subcommittee of the Environmental Management Advisory Board, the APMS was requested to review available information from sources internal and external to the DOE, considering past contract and project performance reviews in EM and lessons learned by the Office of Science as appropriate. In addition, the Subcommittee was requested to examine how stakeholder communications, expectations, and risks are identified and mitigated, as well as how projects evolve from concept through completion.

The Subcommittee was requested to provide its observations and recommendations to the EMAB for approval and forwarding to the Assistant Secretary for EM as input to EM's updated strategy for reducing project and contract risks, and for the removal of EM projects from the High Risk projects listing. Periodic progress briefs and discussions with the Assistant Secretary and

designated EM leadership were requested on interim observations and findings. All elements of EM have provided ready access to information for the Subcommittee.

On November 1, 2010, Dr. Triay forwarded a response memorandum to the September 15 report. This response addressed each issue raised and each recommendation made, and listed actions being taken to improve project and contract management. On November 2, a very comprehensive report (124 pages) outlining continuous improvement actions in acquisition and project management was approved by Dr. Triay, and a conference call was held with EM senior management to discuss the response memorandum and to answer questions.

On November 8, 2010, Deputy Secretary Poneman forwarded a letter to the Acting Comptroller General at the GAO indicating how EM improvement initiatives are addressing shortcomings identified in previous GAO reports. On November 17, an EMAB public meeting was held via teleconference and the full Board approved a report of the Subcommittee concluding that the response was comprehensive and aligned with the September 15 recommendations.

On February 24, 2011, the Board approved a report on interim findings and observations of the Subcommittee derived from meetings and conference calls with senior EM and DOE Office of Management representatives as well as a DOE Contract and Project Management Summit in December 2010.

#### **Discussion:**

Acknowledging that improvement in contracting and project management is an on-going endeavor and priority for EM leadership, the Subcommittee has continued its assessments of EM's progress toward achieving its improvement initiatives. During this period the Subcommittee focused on the following issues: (a) further review of the lessons learned process; (b) advisability of returning to a Management and Operating (M&O) or M&O-like model for EM sites; and (c) EM's implementation of recommendations to improve acquisition and project management as presented by the Subcommittee on September 15, 2010, and addressed by Dr. Triay in the November 1, 2010, memorandum regarding planned actions to address the findings and recommendations.

Subcommittee members met and participated in conference calls with the EM Consolidated Business Center (CBC); EM headquarters; National Nuclear Security Administration (NNSA); U.S. Army Corps of Engineers (USACE); and the GAO. Discussions centered on the issues listed above.

A visit to Hanford would be beneficial to completely address the issue of returning to an M&O or M&O-like model for EM sites. The Subcommittee is planning a visit to Hanford prior to Fall 2011. Accordingly, this is a second interim report pending further information gathering and analysis on the M&O model issue.

The Subcommittee notes that DOE, GAO and other stakeholders acknowledge that EM is faced with balancing the requirements and demands of numerous external stakeholders. But, EM's performance is often not evaluated with full consideration of the challenges EM projects face beyond those of other federal projects. Nonetheless, other federal projects have managed to address and overcome such situations through effective acquisition and project management.

There are lessons learned in these cases that would be important for EM to understand. Examples are cited below, but none should be used to excuse ineffective project management:

- EM projects, by their nature, can have higher health, safety and environmental risks than most other federal projects. Most EM projects typically involve levels of radioactive and hazardous wastes that invite external scrutiny and require public input to include outside stakeholders and oversight groups such as the U.S. Environmental Protection Agency (EPA), Defense Nuclear Facilities Safety Board (DNFSB), States and the public.
- A non-EM project or program, such as a new research center, is usually welcomed for bringing new missions and jobs in communities, while an EM waste treatment / disposal project can be met with skepticism and concerns.
- EM project schedules are often driven by negotiated regulatory compliance milestones, and the regulators can use fines and penalties to drive budgeting support of the projects to maintain progress this is not typical to NNSA, Fossil Energy, Science or other DOE projects. While all DOE projects are subject to the vicissitudes of uncertain annual budget appropriations, missing EM regulatory milestones due to a lack of funding places EM projects at higher risk.
- EM's environmental restoration program is consistently cited as one of DOE's highest priorities. The Subcommittee believes that within DOE, opportunities exist to reexamine and adjust priorities and mandates to better support EM. In the Subcommittee's final report, such examples will be identified along with recommendations.

#### **Interim Findings and Observations:**

From the activities described above, the Subcommittee presents the following additional interim observations:

- 1. Budget trends continue to indicate there is increasing pressure on program direction funding, suggesting a need to revisit the idea of developing a revolving fund to support project and acquisition management personnel and support costs. Contract administration and adequate resourcing of project and acquisition management personnel in the Field, where the "rubber meets the road" both in terms of project planning and delivery, remain areas where EM's success at achieving its improvement initiatives is at risk.
- 2. The difficulty in acquiring adequate staffing for executing projects continues to be a concern of multiple stakeholders. As cited in Dr. Triay's November 1, 2010, response to the EMAB's September 15, 2010, report, one of the key initiatives planned and put into action was to staff complex and high cost EM projects with Deputy Federal Project Directors from the USACE to augment EM with the experience and knowledge base of seasoned USACE project managers. A report from USACE indicates the plan to assign USACE employees as deputy project directors on three sizable projects as a partial solution to this problem has not been successful to date. Although considerable effort was invested in selecting the projects and the individuals to be assigned, none actually have proceeded to the intended objectives. Further, it appears that the benefits expected from this initiative for the success of EM projects are not universally accepted as valid at either EM headquarters or in the Field. The idea appears to be sound on its face, but

the inability to execute it indicates there is a flaw of some sort in the command control system. The Subcommittee believes that a solid command and control system is a fundamental need for the successful execution of complex, high cost projects and clear accountability of EM management to execute the direction and decisions of the EM Assistant Secretary. This lack of a strong command and control system remains an area for improvement.

- 3. The turnover in the EM Office of Project Management continues to frustrate the desire to strengthen the office as an effective project management organization. Multiple stakeholders remain concerned over the lack of stability in not having a standing Director comparable with the DOE Office of Science's Director of the Office of Project Assessment, Dan Lehman. Further, it is observed that clarity of roles and responsibilities between EM headquarters and the Field, and between the EM Office of Project Management and the DOE Office of Engineering and Construction Management (OECM) remains an area of frustration.
- 4. GAO representatives indicate they consider human capital, institutionalizing improvements, cost estimating, project discipline, and premature decision-making to be top focus areas for EM in achieving further improvements in project and acquisition management.
- 5. The process of identifying lessons learned is in place, but turning those lessons into usable knowledge is difficult and requires scarce project leadership time. No clear process requiring a review and use of past lessons learned in the formal acquisition business cycle has been found.
- 6. The CBC is responsible for acquisition processes at small sites and for providing assistance and specific services to all sites. Progress is being made in pre-award contracting standardization, and an effort to improve communications across functional areas is being led by CBC. A major challenge is alignment of contract management and project baseline management.
- 7. The CBC Office of Cost Estimating and Analysis is established and is interfacing with the Tri-Service Automated Cost Engineering System program, the USACE, and other federal cost estimating groups to develop cost databases. The office also has good relationships with customer cost estimating groups. Cost estimating is one of GAO's high interest areas, and long term improvement is contingent on avoiding baselining too soon as well as the temptation to reduce an estimate which is the "wrong answer" (too high) for political reasons.
- 8. Relationships among EM, OECM, Office of General Counsel, and the Office of Procurement Assistance have shown great improvement. However, confusion still exists over chain of command and who decision-makers, decision influencers, sponsors, and opponents are. Federal Project Directors (FPD) should serve on Source Evaluation Boards, but are spread thinly and many are unable to do so. A greater awareness that EM should manage the contract rather than the contractor is required. As noted earlier, Field perceptions on the roles and responsibilities between OECM and the EM Office of Project Management remain an area of frustration particularly when there are redundant data calls for the same or similar information. Coordination and clarity on redundant data calls would support improvements.
- 9. NNSA is adopting an "eyes on / hands off" approach to acquisition and project management between headquarters and the Field, and between field federal managers and contractors. While they recognize the benefits of using experience and lessons learned of

successful FPDs on new projects, they are finding it difficult to staff new projects because of a lack of mobility among federal employees. NNSA would like to have program direction funding included in project costs rather than trying to draw from a declining overall source of funding.

## **Recommendations:**

The Subcommittee has no further recommendations at this time.