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Good morning, Madam Chairman, Ranking Member Johnson, and Members of the Subcommittee. Thank you for this opportunity to provide you an overview of the Department of Energy's Office of Environmental Management (EM) acquisitions and of contract and project management reforms that EM is implementing.

I am Jack Surash, Deputy Assistant Secretary for Acquisition and Project Management (APM) in the Office of Environmental Management (EM). I am a registered professional engineer and have been with the Department for seven years. Previously, I served as a U.S. Navy Civil Engineer Corps Officer for nearly 28 years and I achieved the rank of Captain before my retirement. The EM Office of Acquisition and Project Management was established in February 2012 to provide integrated acquisition and project management services for the EM program. My office is responsible for effective and efficient operation of the procurement functions within EM, including the management of the closeout of EM's program for the American Recovery and Reinvestment Act of 2009. My office also provides project management assistance, project oversight, and performance evaluation.

Overview of the EM Mission

The mission of the Office of Environmental Management (EM) is to complete the safe cleanup of the environmental legacy brought about from five decades of nuclear weapons development and government-sponsored nuclear energy research. One of the major focuses of the EM federal workforce is to carry out an effective and efficient process for acquiring construction, demolition, waste management, and environmental cleanup services and then manage the ensuing contracts and projects to ensure the scope of work is delivered to specifications within the negotiated costs and schedules.

EM continues to make significant progress each and every year. Although some of these projects have experienced challenges in the past, here are a few of the cleanup results we have achieved under our contracts during the last fiscal year:

- In Oak Ridge, Tennessee, demolition of 90 percent of the north wing of the radioactively contaminated K-25 facility was completed. That is part of is DOE's largest ever demolition project. K-25 was the world's first gaseous diffusion plant for uranium

enrichment, and it was the largest building in the world under one roof at the time it was built in 1943. The north wing alone was nearly as large as two football fields. Known today as the East Tennessee Technology Park, it is part of the largest environmental remediation project in Tennessee's history.

- At the Idaho National Laboratory in Idaho Falls, construction of the eighth buried waste retrieval facility was completed on schedule and under cost. Accelerated Retrieval Project VIII has been constructed over pits 1 and 2 at the Subsurface Disposal Area. With a total area of just under two acres, it is the largest facility of its kind that has been built on the site.

- The Savannah River Site in South Carolina has treated over 600,000 gallons of high level liquid waste, stabilizing the highly radioactive constituents of this waste in 275 vitrified glass canisters.

- At the Richland Operations Office in Washington State, EM has made major progress in the cleanout of one of the site's most complex and hazardous facilities, the Plutonium Finishing Plant. In October, EM removed a 10-ton, two-story contaminated glovebox from the plant. Over 75 percent of the facility's 232 gloveboxes have been removed, marking major progress on the path of demolishing the facility.

EM Contracts

I oversee execution of EM contracts in my role as the Head of Contracting Activity (HCA). As such, I am responsible for the effective and efficient operation of the procurement and assistance function within Environmental Management, and compliance with pertinent statutes, regulations, and Administration policies to achieve the mission, goals, and objectives of the Department. My staff and I assure effective project, acquisition, and contract management in the execution of the EM program, by working closely with senior level officials in Headquarters and Field Managers; external stakeholders; and major contractors to achieve acquisition and project management objectives of the Office of Environmental Management. We also provide current, innovative and standardized policy, training, tools, oversight, and guidance for project, acquisition, and contract management.

To assist the Subcommittee with their understanding of the current EM contracts portfolio, I think it is important to give a brief overview of the history of the contracts that have supported the program. EM in the 1990s was characterized by decentralized, individual site acquisitions. At that time, the portfolio consisted of approximately 12 Management & Operating (M&O) contracts that covered almost all the work performed at 12 separate sites. In contrast, the EM portfolio in 2013 uses a complex-wide, standardized acquisition process that includes over 35 major traditional cost-type contracts that replaced 10 of the M&O contracts in order to drive contractor performance. Two M&O contracts remain – at Savannah River, South Carolina and at Carlsbad, New Mexico.

EM transitioned from the historically large-site M&O contracts by unbundling them— i.e., using multiple smaller contracts to achieve program objectives. The contract type for the new, smaller contracts is based on a range of factors: the overall complexity of the work; extent of knowledge

of existing conditions, such as type and amount of waste; and amount of project risk that can be borne by the contractor. This strategy enables DOE to hire contractors that have specific expertise to perform discrete scopes of work. It also focuses the contractor effort on accomplishing the work scope by using clear metrics and incentivizing attainment of the end results within cost and schedule.

This strategy has been implemented with demonstrated success. At the Hanford Site in eastern Washington State, remediation of contamination along the Columbia River was procured separately as the River Corridor Project. Remediation along the 50-mile stretch of this major Pacific Northwest River was of particular importance to the local and regional stakeholders. At the Idaho National Laboratory, cleanup of the site was procured separately from laboratory operations to enable contractors with the relevant experience to carry out these two highly disparate requirements. At Savannah River, the scope to manage and treat the highly radioactive liquid waste stored in large underground tanks performed via a separate contract than the rest of site operations. At the Portsmouth Gaseous Diffusion Plant, a separate contract from the site infrastructure contract covers the work to decontaminate, demolish, and dispose of the extremely large buildings and vast amounts of equipment used to enrich uranium for nuclear weapons purposes.

EM has Made Progress in Implementing Contract and Project Reforms

EM's contract and project management has long been designated a "high risk area" by the Government Accountability Office (GAO). I am pleased to report that in the 2013 biennial update, the GAO narrowed the scope of its high risk designation, focusing on EM capital asset projects with costs greater than $750 million. In that same report, GAO recognized EM management for demonstrating "strong commitment and top leadership support for improving contract and project management." A number of improvements have been made and we will continue to develop and apply further improvements in the future. As I have often stated--acquisition and project management reform is a journey, not a destination. We are focused on sustained process improvements with the goal of improving results and protecting the taxpayer's interests.

Key reforms EM has instituted as part of our drive to continuously improve our processes include:

- Implementing policies requiring more front-end planning;
- Ensuring federal project directors and contracting officers have access to relevant training to help enhance their contract and project management knowledge;
- Improving cost estimating;
- Conducting more frequent project reviews by peers and experts in project management to ensure issues are identified early and lessons learned are being applied in real-time;
- Selecting proper contract types; tying fee strategies to final outcomes; and
- Restructuring our portfolio into smaller, better defined capital asset projects.

Additionally, we currently adhere to the following guidance for contracts for complex nuclear capital construction projects that was directed by the Deputy Secretary of Energy on December 13, 2012:

- *Improved Upfront Planning.* We assure proper upfront planning has been conducted so that requirements have been clearly identified and appropriate design maturity and technology readiness have been achieved and, depending on the complexity of the project, we now require 90 percent design completion prior to baseline approval. We ensure that safety is fully integrated into design early in the project; that contract requirements are clearly defined prior to issuing a solicitation for construction or major equipment purchases; and that a project is planned based on funding that is affordable and executable.
- *Contracting Strategy.* We first consider the use of a firm-fixed-price contract to complete work requirements in order to cap the government's cost liability. When a firm-fixed-price contract is not the appropriate contract vehicle, we incorporate contract clauses, such as liquidated damages (that provide an additional incentive for on-time delivery of products and services and make the Government whole for damages suffered as a consequence of non-performance), and ensure the contractor uses qualified and reliable sources for procurement of critical items. We structure contracts such that all or a significant portion of the fee for interim milestones will be provided provisionally and must be returned if the contractor does not fulfill its ultimate contractual obligations. In cases where it is appropriate, and when the total cost to perform can be estimated with reasonable certainty, we also use hard cost caps or a cost share approach to shift greater risk to the contractor.
- *Performance Measures.* We put in place objective performance measures to the maximum extent possible to incentivize optimal contractor performance and reduce costs. We have also enhanced our performance reporting system to make actionable performance data available to each Acquisition Executive to maintain real-time situational awareness of costs, performance, and other important metrics so they can proactively engage and mitigate potential issues. We are also ensuring that contractor performance continues to be reported into the Government's contractor past performance database that is available for use in evaluating future contract awards. Finally, we have enhanced the federal oversight of contracts to ensure products are delivered as specified on time and within budget.
- *Project Peer Reviews.* We have expanded the use of project peer reviews following a process similar to DOE's Office of Science. We also have partnered with US Army Corps of Engineers to obtain cost estimating services as well as resources for project peer reviews.

EM Contract Reforms have Driven Some Notable Project Successes

The following examples are noteworthy of how EM contract reform initiatives led to results that were above our expectations: (1) Rocky Flats Closure Project, (2) Fernald Closure Project, (3) Idaho Nuclear Facility Decontamination and Decommissioning Project and (4) Recovery Act projects. In all these examples, the work was completed ahead of the target schedules and below the target costs.

Key success factors associated with these contracts were: the relatively short cleanup timeframe (e.g., less than 10 years); the pre-determined end-state and land use; identified off-site storage

and disposal locations for special nuclear materials and radioactive waste, respectively; agreements with the regulators and communities about the allowable amount of residual contamination remaining on site; the use of earned value measures on the cleanup baseline to measure progress in lieu of numerous regulatory milestones; and predictable funding appropriated by Congress.

Rocky Flats Closure Project, located northwest of Denver, Colorado, was completed in October 2005. The Project entailed closure and cleanup of the 6,245-acre site, including the 385-acre industrial area. Over 800 buildings were demolished and 100 metric tons of plutonium residues were processed and shipped. The radioactive waste shipped for disposal from the site was enough to fill a string of railcars 100 miles long. Today, DOE's Office of Legacy Management manages a 1,300-acre area encompassing the former industrial area, and the remaining 4,900 acres is managed by the U.S. Fish & Wildlife Service as the Rocky Flats National Wildlife Refuge. The project was originally estimated at a cost of $3.96 billion to be completed in six years. The project was completed a year early and the actual cost came in $550 million below that amount and in 2006 was the first government (non-commercial) project to receive the Project Management Institute's (PMI) Project of the Year award.

Fernald, Ohio's massive cleanup included remediation and removal of radioactive wastes from two concrete silos (8,900 cubic yards); another silo (5,100 cubic yards cold metal oxides; six waste pits (over 1 million tons); six million cubic feet low-level wastes; 174,912 gallons low-level liquid mixed waste; and 31 million pounds of nuclear product. Additionally, 224 buildings, 400 acres soil, and a 225-acre groundwater plume contaminated with radioactivity were remediated. Today, DOE's Office of Legacy Management manages the Fernald Preserve, a 1,050-acre undeveloped park, with a growing diversity of native plants, birds, deer, and small animals. The project was completed in October 2006 at a cost of $4.4 billion, 12 years early and $7.8 billion below initial estimates. In 2007, the project received PMI's Project of the Year award.

The Idaho Nuclear Facility Decontamination and Decommissioning Project, completed in September 2012, entailed the deactivation, decontamination, and decommissioning of surplus nuclear, radiological, and industrial facilities at the Idaho National Laboratory (INL). The project eliminated the risk posed by 171 unneeded surplus facilities, and eliminated the expense of maintaining a facility with a footprint of over 1.63 million square feet. The project was completed on time and $440 million below the $796 million project baseline.

EM has demonstrated success in accelerating the environmental cleanup of contaminated facilities and lands across its complex utilizing the $6 billion received in American Recovery and Reinvestment Act (ARRA) funds. More than 133 specific cleanup projects/activities were initiated at 17 sites across 12 states. In part due to the Recovery Act investments made since 2009, the EM has reduced its cleanup operations footprint by 74 percent, surpassing the original goal of a 40 percent footprint.

EM learned a number of key lessons from these contracts. Contract types were traditional cost plus incentive fee and were specific about cleanup goal, the completion date and the amount of funding DOE would provide. DOE aligned the contractor's profits with the speed and cost of contract completion. Other elements of EM's contracting approach included focusing on a few critical outcome measures and setting high change control thresholds. A paradigm shift for DOE

to "Manage the Contract, not the Contractor" incentivized the contractor and allowed the contractor maximum flexibility to complete the project in the safest and most cost-effective manner.

EM Continues To Reform Contract Management and Implement Lessons Learned

Although EM had successes over the years, two projects—the Waste Treatment Plant (WTP) at Hanford Washington and the Salt Waste Processing Facility (SWPF) at Savannah River, South Carolina—have proved especially challenging. Applying the lessons learned over the last decade, EM would have taken a different approach to these projects.

While we cannot go back in time to start over, and those projects have clearly not lived up to our expectations, we have ensured the lessons from our new initiatives are being applied to these projects as we have made modifications to the contracts. Areas we are currently focused on for those projects include: resolving technical issues that have impacted the progress on the WTP, contract negotiations consistent with the Deputy Secretary's guidance on contractor's accountability for their actions, and establishing new revised baselines for both projects.

These projects and the rest of EM's contract and project portfolios have benefited from targeting the contract/project change process as an area of high priority within EM. In addition, I have partnered with DOE's Office of Acquisition and Project Management to provide training on improving the contract change process on our EM contracts to our Federal staff.

EM has implemented a standardized acquisition planning process to enable future cleanup acquisitions and contract transitions to proceed more quickly and efficiently. We have co-located many of the resources we use to support our most complex acquisitions at the EM Consolidated Business Center (EMCBC) in Cincinnati, Ohio. It provides business services to certain EM sites that, because of their small size, did not have specialized expertise for such functions as procurement, contract management, finance, and legal services.

I host weekly reviews to discuss the status of major acquisitions planned for the next two years and the status of options on key contracts. We have an EM HCA Directive that helps us maintain oversight over contractor business systems. My staff and I monitor Fee Determination processes and past performance ratings and ensure that Earned Value Management Systems (EVMS) and insight into cost schedule and performance are emphasized throughout contract execution by both contracts and projects professionals.

Contract and project management staff are key partners in assuring that EM performs its cleanup mission and executes contracts to achieve our goals as effectively and efficiently as possible. Teamwork and coordination is essential among program and contracting communities throughout the contracting process, and I personally monitor new contracts and changes to existing contracts through a business clearance process that requires our site offices to obtain HCA approval of prenegotiation positions over $25 Million.

This is part of a conscious campaign to maintain discipline throughout the Contract Changes and Equitable Adjustments processes. This is done with an eye toward increasing vigilance against cost growth and it helps improve schedule performance. It also helps ensure that upper

management actively oversees key contracts at our sites. The Deputy Secretary has issued direction to all DOE activities. I have reinforced that direction through various HCA Directives. This direction requires briefings/reviews before key contract and project events such as:

- Contract Award
- Option Exercise
- Fee Determinations
- Past Performance Evaluations
- Approval to move to next phase of Design/Construction

To hold EM managers accountable for acquisition results, EM uses an Annual Performance Agreement. The agreement is signed by Senior Advisor for Environmental Management (EM-1) and all his direct reports. The agreement includes EM goals, strategies and annual metrics that flow into each manager's performance plan. The goal of improving project and contract management with the objective of delivering results on time and within cost has six strategies and ten performance metrics that identify our highest priority improvement areas to address deficiencies that GAO and our own planning has identified, which include: assessment of staffing and skill level, independent validation of effectiveness and sustainability of implementing corrective measures, timeliness of change control, meeting small business goals and being a strong owner. The strategies and metrics provide the roadmap and are a means to measure progress and I personally review progress on the metrics on a monthly basis.

Conclusion

I am honored to be here today representing the Office of Environmental Management, and EM is committed to achieving our mission. We will continue to apply innovative acquisition strategies to complete work safely, on schedule, and within cost thereby demonstrating value to the American taxpayers. We continue to collect lessons learned and make improvements and adjustments along the way to ensure mission success and protection of the interests of the Federal government and U.S. taxpayer. Thank you for inviting me to speak with you today. I am pleased to answer any questions you may have.