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Good morning, Mr. Chairman, Ranking Member Kaptur, and Members of the Subcommittee. I am pleased to be here today to represent the Department of Energy's (DOE) Office of Environmental Management (EM). I would like to provide the Members with an overview of the EM program, key accomplishments during the past year, 2013 planned accomplishments and progress to date, and the projected impacts of sequestration.

Overview of the EM Mission

EM's mission is to complete the safe cleanup of the environmental legacy resulting from five decades of nuclear weapons development and government-sponsored nuclear energy research. This environmental legacy includes 88 million gallons of the world's most dangerous radioactive wastes, thousands of tons of spent nuclear fuel (SNF), over ten thousand containers of excess plutonium and uranium, over five thousand contaminated facilities, millions of cubic meters of contaminated soil and billions of gallons of contaminated groundwater. As the largest environmental cleanup program in the world, EM was charged with the responsibility of cleaning up 107 sites across the country; an area equal to Rhode Island and Delaware combined. EM has made significant progress in this cleanup mission, completing work at 90 of the 107 cleanup sites through the end of 2012.

EM Cleanup Objectives

EM continues to pursue its cleanup objectives safely within a framework of nuclear safety orders, environmental regulatory compliance commitments and best business practices. The rationale for cleanup prioritization is based on achieving the highest risk reduction benefit per radioactive content (activities focused on materials and wastes that contain the highest concentrations of radionuclides and sites with the highest radionuclide contamination). Taking many variables into account, EM has generally prioritized its cleanup activities across the EM complex as follows:

- Safety and security
- Environmental Compliance

- Radioactive tank waste stabilization, treatment, and disposal
- Spent (used) nuclear fuel storage, receipt, and disposition
- Special nuclear material consolidation, stabilization, and disposition
- High-risk soil and groundwater remediation
- Transuranic and mixed/low-level waste disposition
- Soil and groundwater remediation
- Excess facilities deactivation and decommissioning.

In addition to these priorities, EM is committed to sound technology development and deployment as a way to reduce costs and fulfill our critical mission. EM develops and implements first-of-a-kind technologies to further enhance its ability and efficiency in cleaning up radioactive waste. Through these innovations, EM and the companies that perform its cleanup work have remained world leaders in this arena. Our work in EM enables other crucial DOE missions to continue across the United States. By reducing our cleanup footprint, EM is lowering the cost of security, surveillance, infrastructure, and overhead costs that would otherwise continue for years to come.

Additional strategies are integrated into cleanup activities that are important to the achievement of EM cleanup progress as well as the stakeholders and states where cleanup sites are located. Most importantly, EM will continue to discharge its responsibilities by conducting cleanup within a "Safety First" culture that integrates environmental, safety, and health requirements and controls into all work activities. This ensures protection to the workers, public, and the environment.

Key Accomplishments in the Past Year

I would like to take this opportunity to highlight a number of the Office of Environmental Management's most recent accomplishments.

Continuous Improvement in Integrated Safety Management

One of my highest areas of emphasis has been in leading improvements to the organizational, safety, and security culture of EM. An organization's culture directly impacts how the organization performs. For industrial organizations, and particularly for nuclear organizations, having a strong safety and security culture is imperative for ensuring the safe and secure performance of work. It must be a fundamental value shared by all members of the organization, at all levels within the organization.

In 2011, DOE accepted the Defense Nuclear Facilities Safety Board recommendation to strengthen the safety culture at the Waste Treatment and Immobilization Plant in Hanford. Recognizing the importance of this initiative we have expanded our scope to improve safety culture at all of our EM sites. Efforts in this area are ongoing, and we have trained more than 800 senior federal and contractor managers on Leadership for a Safety Conscious Work Environment. We are seeing a clear recognition by managers of the need to improve the flow down of expectations throughout our sites and headquarters. We have also continued to improve our safety and security culture through other ongoing initiatives, such as evaluating field site safety management, sharing safety lessons learned and best practices, and working to improve our security and quality assurance programs across all of EM.

Part of maintaining a strong organizational culture is embracing the concepts of continuous improvement and being a learning and questioning organization. While EM has already seen significant improvements in its culture, there is more work to be done, and this will continue to be a key area of focus for EM.

Project and Contract Management

A second area of emphasis has been improvement of project and contract management, considering EM's project and contract management has long been designated a governmental "high risk area" by the Government Accountability Office. Key EM reforms in this area include implementing policies requiring more front-end planning; ensuring federal project directors and contracting officers have access to relevant training to help enhance their project and contract 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 and non-capital operations activities.

These reforms are already bearing fruit. GAO has recognized EM's progress in this area. On February 14, 2013, GAO issued its biennial update to the high risk list. In recognition of EM's improvements in contract and project management, GAO narrowed the scope of its high risk designation, focusing on EM capital asset projects with costs greater than $750 million. In the report, GAO recognized EM management for demonstrating "strong commitment and top leadership support for improving contract and project management." EM will continue the specific project and contract management reforms above.

The Office of Environmental Management is continuing to make progress on constructing EM's two largest projects -- the Waste Treatment and Immobilization Plant in Richland, Washington and the Salt Waste Processing Facility in Aiken, South Carolina.

The Waste Treatment and Immobilization Plant is vital to the Department of Energy's mission to treat and immobilize in glass the bulk of approximately 56 million gallons of radioactive waste stored in 177 underground storage tanks at the Hanford site. We have focused our attention on resolving the technical and management issues at the Pretreatment Facility and the High-Level Waste Facility. Full construction continues on the Low-Activity Waste Facility, Analytical Laboratory and the Balance of Facilities (support facilities). The Department has determined it may now start ramping-up construction activities in the High-Level Waste Facility in areas not impacted by technical issues. Over the last several months, the Energy Secretary and a number of top scientists and engineers have been reviewing many aspects of the project. Approaches are being evaluated to resolve the criticality, hydrogen generation, erosion/corrosion, and tank mixing issues. Technical teams developed as a result of this review draw upon expertise from academia, industry, and the Department's national laboratories. The Department is committed to resolve these issues in order to produce a high-confidence design and baseline for the Pretreatment and the High-Level Waste facilities of the WTP, prior to resuming full construction activities.

EM's second largest construction project is the Salt Waste Processing Facility, which will treat the salt portion of the liquid radioactive waste inventory at the Savannah River Site is 69 percent complete. A pilot version of the plant has been operational since 2008, and as a result we have high confidence in the technical capabilities of SWPF. To date, the pilot plant has processed over 3 million gallons of tank waste. Due to delays in the delivery of key facility components at acceptable quality levels for nuclear facilities, including mixing vessels, SWPF is experiencing cost over-runs and schedule delays. Since the delivery of the mixing vessels last year, we are working closely with our contractor to identify the most economical and timely path for completion.

Finally, I would like to provide an update on a third important EM construction project. The Integrated Waste Treatment Unit will treat 900,000 gallons of radioactive liquid waste stored in underground tanks at the Idaho National Laboratory. Following the completion of construction, the facility began startup testing. However, startup testing was suspended in June 2012 to allow detailed evaluation of a system pressure event that occurred during cold commissioning.

Each of these three construction projects involve the processing, treatment and immobilizing high level radioactive/hazardous waste into glass or solid carbonate. These projects have been especially challenging considering these are first-of-a-kind and one-of-a-kind facilities.

Cleanup Progress

Thanks, in part, to the improvements in integrated safety management, contract management, and project management, EM has achieved major cleanup successes.

- *Footprint Reduction.* In 2009, the total footprint of EM's cleanup sites was 931 square miles. Through January 2013, we have reduced that figure by 74 percent, primarily through the use of Recovery Act funding to complete the cleanup of large areas of the Hanford and Savannah River sites.
- *High Level Radioactive Waste.* We have also made significant progress in the treatment of high level radioactive waste, which represents the most hazardous and costly component of our cleanup mission. At the Savannah River Site, we achieved closure of two high level waste tanks—the first tanks closed at the site since 1997—and packaged a record high of 275 canisters of high level waste at the Defense Waste Processing Facility.
- *Transuranic Waste.* Finally, we continue to achieve major successes with our nation-wide program for the transportation and disposition of transuranic waste. To date, we have sent more than 11,000 shipments of this waste to the Waste Isolation Pilot Plant in Carlsbad, New Mexico for disposal. At this one-of-a-kind facility, EM emplaces solid radioactive waste in underground salt beds at a depth greater than the height of the Empire State Building.

EM has achieved significant progress. However, I would also like to provide you an update on an issue that has emerged this year. In 2005, DOE completed a tank stabilization effort designed to remove much of the liquid waste from Hanford's single shell tanks. Last month DOE found that one tank continues to leak and five other tanks are showing declining liquid level trends that may indicate leaking. Video examination of the interior of the tanks is planned in the coming months to confirm the leaks. Both the Department of Energy and the Washington State Department of Ecology agree that the leaks pose no immediate health threat. But safe storage of tank waste until it can be treated for permanent disposal is a top priority, and the Office of Environmental Management is working to further investigate and evaluate the steps needed to address the issue.

FY 2013 Planned Accomplishments and Progress to Date

In FY 2013, EM will continue to reduce environmental risks associated with radioactive and hazardous contamination across the EM complex. Under the President's FY 2013 budget request, specific planned accomplishments included the immobilization of over one million gallons of high level liquid radioactive waste, the closure of two high level waste tanks, the demolition of over 40 radioactive and nuclear facilities, and the disposal of nearly 10,000 cubic meters of legacy transuranic waste.

EM has already made significant progress this fiscal year. I would like to take this opportunity to highlight just a few of the year's notable cleanup accomplishments:

- In Oak Ridge, Tennessee, EM completed the demolition of the north wing of the radioactively contaminated K-25 facility. 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 of construction. The north wing alone was nearly as large as two football fields. EM has now demolished almost 90% of the overall K-25 facility.
- At the Idaho National Laboratory in Idaho Falls, EM has completed the construction of the eighth buried waste retrieval facility on schedule and under cost. Accelerated Retrieval Project VIII (ARP 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.
- To date this fiscal year, the Savannah River Site has treated nearly 600,000 gallons of high level liquid waste, stabilizing the highly radioactive constituents of this waste in 67 vitrified glass canisters.
- At the Hanford Site, EM has made major progress this year 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. EM has now removed over 75 percent of the facility's 232 gloveboxes, marking major progress on the path of demolishing the facility.
- At the Paducah site, EM successfully demolished one of the site's most contaminated structures the seven-story Metals Plant. The project was completed ahead of schedule and within budget, and represents a major milestone in the cleanup of the Paducah Gaseous Diffusion Plant.
- At the Los Alamos National Laboratory, the site completed nearly 250 shipments of transuranic waste to the Waste Isolation Pilot Plant through December 2012. This surpassed the shipment target for the year by nearly a third, and also shattered the previous site record of 171 annual shipments. The site's waste shipment progress is a testament to the benefits of effective cooperation with stakeholders and regulators. After the 2011 Las Conchas Fire threatened the Laboratory's transuranic radioactive waste storage facility, EM worked with regulators and stakeholders to realign site priorities to support the accelerated disposal of this waste.

The Impact of Sequestration

Like other federal organizations, EM faces significant negative impacts from sequestration. Sequestration will result in across-the-board cuts totaling more than $420 million in states like Tennessee, New Mexico, Idaho, Washington and South Carolina. This constitutes an on average 7 percent reduction in annual funding, but since the entire reduction is being implemented in the second half of the fiscal year, it actually results in a 14 percent reduction in available funds for the balance of the fiscal year.

- As a result of sequestration, we understand that the Department's contractors may be forced to furlough or layoff about 6,900 employees who are responsible for cleaning up nuclear waste at our nation's two highest risk cleanup sites in Washington State and South Carolina. These employment actions may delay the environmental cleanup and remediation work these workers do to protect human health and the environment.
- In addition, the Department is in legally binding agreements with state and federal regulators to make progress in addressing environmental contamination, and funding reductions would put numerous enforceable environmental compliance milestones at risk.
- These cuts may also curtail our ability to continue our progress related to closing the aging -- and in some cases leaking -- single-shell tanks storing over 25 million gallons of liquid radioactive waste at the Hanford site in eastern Washington State.
- Additionally, funding reductions will impact the Waste Isolation Pilot Plant in Carlsbad, New Mexico, which serves as the permanent U.S. geologic repository for transuranic defense waste. The site's ability to support hundreds of radioactive waste shipments this year may be impaired, which could curtail progress on these cleanup activities in several states across the nation.

Conclusion

Mr. Chairman, Ranking Member Kaptur, and Members of the Subcommittee, I am honored to be here today representing the Office of Environmental Management. EM is committed to achieving our mission and will continue to apply innovative environmental cleanup strategies to complete work safely, on schedule, and within cost thereby demonstrating value to the American taxpayers. I am pleased to answer any questions you may have.