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Good morning Chairman Rogers, Ranking Member Cooper, 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 you with an overview of the EM program, key accomplishments during the past year and what we plan to accomplish under the President's \$5,818,024,000 Fiscal Year (FY) 2016 budget request.

Overview of the EM Mission

The Office of Environmental Management (EM) supports the Department's Strategic Plan to position the Department of Energy to meet the challenges of the 21st century and the nation's Manhattan Project and Cold War legacy responsibilities. The Department will leverage past experience, applying best practices and lessons learned; identify, develop, and deploy practical technological solutions derived from scientific research; and look for innovative and sustainable practices that make cleanup more efficient.

The EM program was established in 1989 and is responsible for the cleanup of millions of gallons of liquid radioactive waste, thousands of tons of spent (used) nuclear fuel and special nuclear material, disposition of large volumes of transuranic and mixed/low-level waste, huge quantities of contaminated soil and water, and deactivation and decommissioning of thousands of excess facilities. This environmental cleanup program results from five decades of nuclear weapons development and production and Government-sponsored nuclear energy research. It involves some of the most dangerous materials known to humankind. EM has completed cleanup activities at 91 sites in 30 states; EM is responsible for the remaining cleanup at 16 sites in 11 states.

Since 1989, EM has completed almost \$152,000,000,000 worth of cleanup work. Sites like Fernald in Ohio and Rocky Flats in Colorado, both of which once housed large industrial complexes, are now wildlife preserves that are also available for recreational use. At the Idaho National Laboratory, we have decommissioned and demolished more than two million square feet of excess facilities, and removed all EM special nuclear material (e.g., enriched uranium) from the state. At Savannah River Site, South Carolina, we have produced almost 4,000 canisters of vitrified high-level waste and closed six of the site's underground storage tanks. At

our Portsmouth, Ohio, and Paducah, Kentucky, sites, we have designed, constructed and now operate two facilities to convert over 60,000 cylinders of depleted uranium hexafluoride into a more stable form suitable for beneficial reuse or disposal.

Across the EM complex, our progress in footprint reduction is significant, approximately 90 percent, with now less than 250 square miles remaining, and the progress continues.

EM Cleanup Objectives and Priorities

EM continues to pursue its cleanup objectives safely within a framework of regulatory compliance commitments and best business practices. The rationale for cleanup prioritization is based on achieving the highest risk reduction benefit. Taking many variables into account, EM has generally prioritized its cleanup activities as follows:

- Maintain a safe and secure posture in the EM complex
- Radioactive tank waste stabilization, treatment, and disposal
- Spent (used) nuclear fuel storage, receipt, and disposition
- Special nuclear material consolidation, stabilization, and disposition
- Transuranic and mixed/low-level waste disposition
- Soil and groundwater remediation
- Excess facilities deactivation and decommissioning.

The FY 2016 budget request supports clear, discrete progress in the cleanup of the environmental legacy of the Cold War. In particular, the request will allow EM to:

- Continue High Level Waste tank progress at Savannah River Site through liquid waste treatment at the Defense Waste Processing Facility, while completing construction and continue commissioning of the Salt Waste Processing Facility;
- Expedite tank waste treatment at the Office of River Protection, Hanford, Washington, through the Direct Feed Low Activity Waste (DFLAW) approach by continuing construction of the Low Activity Waste Facility, Analytical Laboratory, and Balance of Facilities at the Waste Treatment and Immobilization Plant and design of the Low Activity Waste Pretreatment System;
- Resume transuranic waste disposal operations at the Waste Isolation Pilot Plant, New Mexico;
- Complete major facility cleanout and demolition projects, including the Plutonium Finishing Plant at Hanford and K-27 at the East Tennessee Technology Park (ETTP) in Oak Ridge, Tennessee; and
- Address key infrastructure needs across the complex, especially upgrades to the fire water system and replacement windows in the B-Hot Cell at the Savannah River National Laboratory.

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 for the workers, public, and the environment.

Key Recent and Near-Term Accomplishments

I would like to take this opportunity to highlight a number of EM’s most recent accomplishments.

Cleanup activities – We continue to make cleanup progress. We have produced nearly 4,000 canisters of vitrified high-level waste at Savannah River Site, South Carolina, converting it to a solid glass form safe for long-term storage and permanent disposal. This is about half of the sludge in the SRS tanks. At Hanford, we have completed cleanup of the bulk of the River Corridor, including more than 500 facilities and 1,000 remediation sites. At Oak Ridge, we are on track to complete preliminary design for the Outfall 200 Mercury Treatment Facility by the end of FY 2015. The budget request continues progress in completing buried waste exhumation at the Idaho site under the Accelerated Retrieval Project. Seven out of a total of nine retrieval areas have been completed, and the funding requested will continue exhumations at the eighth retrieval area, which is the largest retrieval area under the project. With regard to tank closure activities, the FY 2016 budget request will complete bulk waste removal activities from two tanks at Savannah River Site (for a total of eight tanks completed) to meet a 2016 Federal Facility Agreement commitment, and at the Office of River Protection, EM will complete C-Tank Farm retrievals in 2015 leading to closure of that tank farm, and begin A/AX Tank Farms construction for further single shell retrievals.

Contract and Project Management – Our cleanup progress depends in large part on the successful planning, construction and operation of large, often first-of-a-kind, projects and facilities. We continue to emphasize continuous improvement in our contract and project management. First, for example, to ensure that we have skilled federal project directors and contracting officers to cover our large and diverse portfolio of projects, EM has hired 10 Cost Estimators and 23 Contracting Specialists/Officers across the complex in the past year. Second, we require upfront planning, improved cost-estimating capabilities, and we conduct more frequent project reviews to improve the success of our projects. Examples include the successful demolition of the largest gaseous diffusion process building at East Tennessee Technology Park (K-25) in Oak Ridge, nearly one mile long with 1.6 million square feet under roof, a year ahead of the revised baseline cost and schedule. Lessons from this project are now being applied to the other gaseous diffusion demolition projects.

As we have noted previously, DOE is in the process of updating the cost and schedule baseline for the Low Activity Waste Facility, Balance of Facilities and Analytical Laboratory, referred to as LBL. Once technical issues for the High Level Waste and Pretreatment Facilities are resolved

and appropriate design changes are made, DOE will update the baseline for the entire WTP project.

Highlights of the FY 2016 Budget Request

The FY 2016 budget request for EM is \$5,818,024,000. The request includes the proposed reauthorization of the Uranium Enrichment Decontamination & Decommissioning Fund. The budget request for EM is comprised of \$5,055,550,000 for defense environmental cleanup activities and \$471,797,000 for the defense deposit into the Fund, \$220,185,000 for non-defense environmental cleanup activities, and \$542,289,000 for Uranium Enrichment Decontamination and Decommissioning Fund cleanup activities. The request proposes activities to maintain a safe and secure posture in the EM complex, while maximizing our work on compliance activities. To that end, we will engage with our federal and state regulators regarding compliance requirements that may result in changes to the cleanup milestones in 2016.

The FY 2016 budget request supports the continued construction of two unique and complex tank waste processing plants at the Savannah River Site, South Carolina, and the Office of River Protection, Washington. We are working closely with our contractors to identify the most economical and timely path for completion. These two sites are planned to treat over 80 million gallons of radioactive tank waste for ultimate disposal.

In FY 2016, much progress will be made on the treatment of high level radioactive waste in tanks across the complex. Sodium-bearing waste operations at Idaho will continue in FY 2016. This budget request supports preparing for the removal of tank sludges and the cleaning and grouting activities supporting the closure of the final four high level waste tanks at the Idaho site. At the Savannah River site, the FY 2016 request supports continued production of canisters of vitrified waste derived and processed from the high level waste tanks, and the construction of an additional on-site disposal space for saltstone. Construction will continue on the Salt Waste Processing Facility with the tie-ins for liquid waste and other activities being completed in 2016, and progress towards regulatory milestones will be met with completion of grouting and closure of Tank 12 and completion of bulk removal activities for Tank 15. These activities are essential to high level radioactive liquid waste elimination and eventual tank closure.

The Department is working aggressively to complete and operate the treatment facilities and infrastructure to safely immobilize and dispose of tank waste at Hanford. This budget request supports continued construction of the LBL, as well as production engineering and limited construction on the High Level Waste Facility, while resources are dedicated to promptly resolve the outstanding technical issues of the High-Level Waste and Pretreatment Facilities.

At WIPP, we will continue recovery, regulatory, and compliance actions to support safe and compliant operations leading to the planned resumption of waste emplacement in the first quarter of calendar year 2016. The budget request also includes funding for designing and constructing

two line item construction projects - the Exhaust Shaft and the Safety Significant Confinement Ventilation System - which are necessary to protect the environment and safely return the Waste Isolation Pilot Plant to its congressionally mandated mission of defense-generated transuranic waste disposal operations.

Ongoing cleanup efforts continue at Oak Ridge’s East Tennessee Technology Park (ETTP). The FY 2016 budget request supports the demolition of K-27, the last gaseous diffusion process building at Oak Ridge. The request also supports investment in mercury characterization and remediation technologies and the design for the Outfall 200 Mercury Treatment Facility at the Oak Ridge Site. At Hanford, the budget request supports the completion of the Plutonium Finishing Plant Facility (PFP) D&D project to achieve slab-on-grade by the end of FY 2016. The budget request also provides \$83,423,000 for continued line item construction associated with facility modifications to prepare for installation of sludge removal systems in the K West Basin Sludge Removal Project.

Budget Authority and Planned Accomplishments by Site

Office of River Protection, Washington (Dollars in Thousands)

FY 2015 Enacted	FY 2016 Request
\$1,212,000	\$1,414,000

Key Accomplishments Planned for FY 2016

- Move closer to resolution of technical issues dealing with Criticality; Hydrogen Gas in Vessels; Pretreatment Facility Vessels structural analysis; and Erosion/Corrosion
- Maintain planned construction of WTP’s Low Activity Waste Facility, Analytical Laboratory, and Balance of Facilities to support phased commissioning that lead to the planned start of waste treatment in 2022
- Continue production and engineering/design and limited construction for the High Level Waste facility
- Preparation and construction in A/AX tank farm to support single-shell tank retrievals

Savannah River Site, South Carolina (Dollars in Thousands)

FY 2015 Enacted	FY 2016 Request
\$1,259,542	\$1,336,766

Key Accomplishments Planned for FY 2016

- Complete grouting and closure of Tank 12 and complete bulk waste removal activities for Tank 15
- Package canisters of vitrified high-level waste at the Defense Waste Processing Facility
- Operate Actinide Removal Process and Modular Caustic Side Solvent Extraction Unit to process 1.2 million gallons of salt waste
- Conduct liquid waste tie-ins and other support activities supporting startup of the Salt Waste Processing Facility
- Continue closure of legacy transuranic-waste pads under Federal and State regulations
- Monitor, perform analysis, and report on over 2,000 groundwater wells and 5 major streams

Carlsbad Field Office, New Mexico (Dollars in Thousands)

FY 2015 Enacted	FY 2016 Request
\$324,455	\$248,178

Key Accomplishments Planned for FY 2016

- Continue recovery activities to enable initial resumption of waste emplacement in the second quarter of FY 2016
- Continue critical site maintenance and infrastructure activities to support WIPP recovery efforts.

Los Alamos National Laboratory, New Mexico (Dollars in Thousands)

FY 2015 Enacted	FY 2016 Request
\$189,600	\$188,625

Key Accomplishments Planned for FY 2016

- Continue canyon, groundwater, and stormwater investigations, monitoring and protection
- Continue Solid Waste Stabilization and Disposition services and actions to maintain safe storage of stored transuranic inventory above and below grade
- Continue decontamination and decommissioning activities for process-contaminated facilities at Technical Area-21

Idaho National Laboratory, Idaho (Dollars in Thousands)

FY 2015 Enacted	FY 2016 Request
\$405,103	\$366,702

Key Accomplishments Planned for FY 2016

- Complete treatment of sodium contaminated transuranic and dispose of mixed low-level waste, in support of the Site Treatment Plan milestones
- Continue retrieval, processing and disposition of targeted buried waste
- Implement Record of Decision for remediation of tank farm soils and groundwater, unexploded ordinance, and site-wide groundwater
- Continue treatment of sodium bearing waste in the Integrated Waste Treatment Unit

Oak Ridge Site, Tennessee (Dollars in Thousands)

FY 2015 Enacted	FY 2016 Request
\$431,142	\$365,672

Key Accomplishments Planned for FY 2016

- Continue demolition activities at K-27
- Continue planning and design for the Outfall 200 Mercury Treatment Facility
- Continue processing remote-handled transuranic waste debris at the Transuranic Waste Processing Center

Richland Operations Office, Washington (Dollars in Thousands)

FY 2015 Enacted	FY 2016 Request
\$1,007,230	\$914,000

Key Accomplishments Planned for FY 2016

- Complete the Plutonium Finishing Plant Facility D&D project to achieve slab-on-grade by September 2016
- Continue operations, maintenance, and additional modifications of site-wide groundwater treatment systems to optimize contaminant removal
- Complete Columbia River Corridor remediation, except for the 100 K Area, 618-10/11 burial grounds, and Building 324 and associated waste site
- Continue construction of the K-Basin Sludge Treatment Project
- Complete upgrades to the Waste Storage and Encapsulation Facility exhaust system to prepare for transfer to dry storage

Nevada National Security Site, Nevada (Dollars in Thousands)

FY 2015 Enacted	FY 2016 Request
\$64,851	\$62,385

Key Accomplishments Planned for FY 2016

- Complete soil closure activities for 1 contaminated site
- Complete soil characterization activities for 5 contaminated sites
- Support cleanup at multiple sites across the DOE complex by safely and compliantly operating disposal facilities, disposing of approximately 34,000 cubic meters of low-level and mixed low-level radioactive waste

Conclusion

Mr. Chairman, Ranking Member Cooper, and Members of the Subcommittee, I am honored to be here today representing the Office of Environmental Management. We are committed to achieving our mission and will continue to apply innovative environmental cleanup strategies to complete work safely, and efficiently, thereby demonstrating value to the American taxpayers. Our FY 2016 budget request supports compliance activities and our highest priorities. These priorities include the recovery of the Waste Isolation Pilot Plant, restoring operations for its congressionally mandated mission of safely disposing of defense-generated transuranic waste. The request also supports the high priority construction of two unique and complex tank waste processing plants at the Savannah River Site and the Office of River Protection, which will eventually treat over 80 million gallons of radioactive tank waste for ultimate disposal. Our budget request also supports the ongoing cleanup effort at the East Tennessee Technology Park, at Oak Ridge, where EM is in the process of demolishing the last remaining gaseous diffusion plant, K-27, and at Hanford, where we will demolish the Plutonium Finishing Plant to slab-on-grade. All of this work will, first and foremost, be done safely, within a framework of regulatory compliance commitments and best business practices. I am pleased to answer any questions you may have.