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Good afternoon Chairwoman Fischer, Ranking Member Donnelly, 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). At DOE, the safety of our workforce, the communities and tribal nations that surround our sites, and the environment is the Secretary's highest priority. I would like to provide you with an overview of the EM program, key accomplishments during the past year and planned accomplishments under the President's $6,508,335,000 Fiscal Year (FY) 2018 budget request.

Overview of the EM Mission

EM supports the Department of Energy's priorities to meet the challenges leading the cleanup of legacy waste resulting from the Nation's Manhattan Project and Cold War efforts. 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 nuclear fuel and special nuclear material, disposition of about two million cubic meters of transuranic and mixed/low-level waste, vast quantities of contaminated soil and water, and deactivation and decommissioning of thousands of excess facilities. This environmental cleanup responsibility results from five decades of nuclear weapons development and production and Government-sponsored nuclear energy research and development. It involves some of the most dangerous materials known to man.

Since 1989, the EM footprint has been reduced significantly, as cleanup activities have been completed at 91 sites in 30 states. For example, the Fernald site in Ohio and the Rocky Flats site in Colorado, both of which once housed large industrial complexes, are now wildlife refuges that are also available for recreational use. At the Hanford Site in Washington State, the bulk of the cleanup along the Columbia River corridor has been completed including: six reactors cocooned, 502 facilities demolished, 1,201 waste sites remediated, and 16 million tons of waste removed. At the Oak Ridge site in Tennessee, we have completed the decommissioning of five gaseous diffusion uranium enrichment processing facilities---the first time such an

accomplishment has been achieved in the world. 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., highly enriched uranium) from the state. At the Savannah River Site, we have vitrified about half of the tank waste, by producing more than 4,100 canisters of glass, we have also permanently closed 8 of 51 high level waste tanks, and successfully decontaminated and decommissioned approximately 290 facilities, including in-situ decommissioning of two former production reactors.

Today, EM is responsible for the remaining cleanup at 16 sites in 11 states. There is less than 300 square miles remaining to be cleaned up across the EM complex and progress continues. However, as many of us know, the remaining cleanup work presents some of our greatest challenges.

EM Cleanup Objectives and Priorities

EM's first priority is worker safety and we continue to pursue cleanup objectives with that in mind. EM will continue to discharge its responsibilities by conducting cleanup within a "Safe Performance of Work" culture that integrates environmental, safety, and health requirements and controls into all work activities. Taking many variables into account, such as risk reduction and compliance agreements, EM has the following priorities:

- Radioactive tank waste stabilization, treatment, and disposal
- Spent 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

In particular, the FY 2018 budget request will allow EM to:

- Continue important cleanup activities at all of our sites in a safe and deliberate manner that ensures protection of our workers, the public and the environment
- Continue waste emplacement at the Waste Isolation Pilot Plant, including increasing the number of shipments
- Continue construction of the Low Activity Waste Facility, Analytical Laboratory, Effluent Management Facility, and supporting facilities at the Hanford site
- Complete commissioning and startup of the Salt Waste Processing Facility at the Savannah River Site
- Continue with commissioning and start-up activities for the Integrated Waste Treatment Unit at Idaho
- Complete design and begin construction of the Mercury Treatment Facility at Oak Ridge

Before discussing recent and near-term accomplishments, I want to provide a brief update on the recent incident at the Hanford Site that pertains to a partial collapse of one tunnel near the Plutonium Uranium Extraction Plant, also known as the PUREX facility. The tunnel, which has not been in operation for decades, has been used since the 1950s to store contaminated equipment from the PUREX operations. On May 9, as a part of our surveillance program, workers discovered that a 20 by 20-foot section of the tunnels had collapsed. Based on extensive radiological monitoring, including monitoring performed by the State of Washington's Department of Health, there has been no release of radiological contamination from the incident, and no workers were injured or exposed to radiological material as a result.

Workers have since filled in the collapsed section with soil and have placed a cover over the length of the tunnel. We are working closely with the state of Washington on longer-term actions which are under development. We take this event seriously, we will look closely at lessons learned from this event that may apply to other EM facilities. We are continuing to minimize the potential of a radiological release and ensure that our workers and the public are protected. We are committed to working with the State of Washington for a more permanent solution that focuses on maintaining the structural integrity of the tunnel and that permanently addresses the waste.

Key Recent and Near-Term Accomplishments

I would now like to take this opportunity to highlight a number of EM's most recent accomplishments. Recently, the Waste Isolation Pilot Plant (WIPP) received its first shipments of transuranic (TRU) waste since it re-opened in January 2017. The shipments from the Idaho National Laboratory, Savannah River Site, and Waste Control Specialists in Texas were an important milestone for WIPP and for sites that stored TRU waste since WIPP ceased operations in February 2014. Shipments from Oak Ridge and Los Alamos National Laboratory are expected later this year. WIPP is currently receiving three shipments a week, and is expected to ramp up to four shipments a week by the end of 2017. This year, WIPP anticipates receipt of approximately 130 shipments of waste for emplacement in the underground.

EM is continuing to make steady and substantial cleanup progress across the complex. At the Savannah River Site, construction of the Salt Waste Processing Facility is complete. Once in operation, it will significantly accelerate EM's ability to treat tank waste at SRS. At Hanford, demolition of the Plutonium Finishing Plant, once one of the most dangerous buildings in the DOE complex, is now underway and is scheduled for completion later this year. This winter, workers at Idaho's Advanced Mixed Waste Treatment Facility completed a15-year effort to

retrieve, characterize, treat and package more than 65,000 cubic meters of TRU waste (plutonium-contaminated waste boxes, drums, and dirt) to ready it for shipment to WIPP.

Highlights of the FY 2018 Budget Request

The FY 2018 budget request for EM is the largest request in ten years and includes $5,537,186,000 for defense environmental cleanup activities, of which $225,000,000 would be used to address excess facilities to support modernization of the nuclear security enterprise. The Department's Excess Contaminated Facilities Working Group analyzed and developed options for how DOE may prioritize and address the numerous contaminated excess facilities owned by the various DOE program offices. The FY2018 budget request implements a targeted effort to accelerate deactivation and decommissioning (D&D) of specific high-risk facilities at the Y-12 National Security Complex and the Lawrence Livermore National Laboratory not currently in the Environmental Management programs' inventory to achieve substantial risk reduction within four years.

The request will allow EM to maintain a safe and secure posture across the complex, while continuing compliance activities. In FY 2018, we expect to continue to make significant progress in addressing radioactive tank waste at EM sites, as well as to continue our D&D activities and our soil and groundwater remediation activities. In addition, we will continue to manage and disposition special nuclear materials, spent nuclear fuel and transuranic and solid waste.

At WIPP, the FY 2018 request supports continued waste emplacement and ramps up receipt of TRU waste shipments. It also supports the completion of design work and begins construction of the new ventilation system and exhaust shaft.

At the Savannah River Site, the FY 2018 request supports the commissioning and startup of the Salt Waste Processing Facility, and the operation of the Defense Waste Processing Facility to produce 60 to 70 canisters of vitrified high-level waste. In addition, the request initiates the design of the Emergency Operations Center replacement project and supports the safe and secure operation of the H Canyon/ HB-Line for the purpose of processing aluminum-clad spent nuclear fuel and down-blending EM-owned plutonium. These processing activities will, ensure the availability of space in K- and L-Areas for the future receipt of excess research nuclear material that has been removed from civilian sites in foreign countries. These removals provide for safe, secure storage of this material.

At Hanford, EM is working aggressively to complete and commission treatment facilities to safely immobilize tank waste for disposition. The Office of River Protection's FY 2018 budget request represents planned efforts for continued progress required by the Tri-Party Agreement and 2016 Amended Consent Order. The request is designed to maintain safe operations for the

tank farms; achieve progress in meeting regulatory commitments; support the development and maintenance of infrastructure necessary to enable waste treatment operations; continue construction at the Waste Treatment and Immobilization Plant's (WTP) Low-Activity Waste Facility, Effluent Management Facility, Balance of Facilities, and Analytical Laboratory to support treatment of tank waste by 2023; and resolve significant technical issues with the WTP Pretreatment facility.

Ongoing Hanford cleanup efforts will continue at the Richland Operations Office. The FY 2018 budget request supports waste site remediation activities along the River Corridor and operations necessary to provide monitoring of the 324 Building; continues groundwater remediation and continues progress on the K West Basin sludge removal project.

At the Idaho National Laboratory, the FY 2018 request supports buried waste retrieval activities and work necessary to commission and startup the Integrated Waste Treatment Unit. Once this facility is in operation, it will treat the approximately 900,000 gallons of radioactive sodium bearing waste. The request also supports repackaging and the characterization of contact-handled transuranic waste at the Advanced Mixed Waste Treatment Project.

At Oak Ridge, the request supports continued demolition of the remaining facilities and site restoration at the East Tennessee Technology Park, as well as completion of the design and initiation of early site preparations for the Mercury Treatment Facility at the Y-12 National Security Complex. Additionally, the budget supports preparation of Building 2026 at the Oak Ridge National Laboratory to support processing of uranium-233 materials**.**

With some of the most challenging cleanup work still remaining in the EM program, we understand the importance of technology development in reducing lifecycle costs and enhancing our effectiveness. To help address many of the technical challenges involved with high-risk cleanup activities, the FY 2018 request of $25,000,000 for Innovation and Technology Development projects to tackle our greatest challenges with remediation of Technetium-99, Mercury, Cesium-137 and Strontium-80, and the integration of advanced tooling and robotics for enhanced worker safety and productivity.

Budget Authority and Planned Accomplishments by Site

Office of River Protection, Washington (Dollars in Thousands)

FY 2017 Enacted	FY 2018 Request
$1,499,965	$1,504,311

Key Accomplishments Planned for FY 2018

- Continues construction and commissioning activities for the Direct Feed Low Activity Waste approach at the Waste Treatment and Immobilization Plant, and Low Activity Waste Pretreatment System
- Maintains tank farms in a safe and compliant manner
- Conducts Single-Shell/Double-Shell Tank Integrity assessments
- Supports single-shell tank retrieval activities and continues work to address tank vapor safety concerns.

Savannah River Site, South Carolina (Dollars in Thousands)

FY 2017 Enacted	FY 2018 Request
$1,369,429	$1,447,591

Key Accomplishments Planned for FY 2018

- Completes Salt Waste Processing Facility commissioning and startup in late 2018
- Brings the Defense Waste Processing Facility back online to continue vitrifying high-level waste
- Initiates Saltstone Disposal Unit #7 design and initiate long-lead procurement for cell construction
- Down-blends EM-owned (non-MOXable) surplus non-pit plutonium for disposal at Waste Isolation Pilot Plant
- Processes aluminum clad spent nuclear fuel

Carlsbad Field Office, New Mexico (Dollars in Thousands)

FY 2017 Enacted	FY 2018 Request
$324,720	$323,041

Key Accomplishments Planned for FY 2018

- Continues waste emplacement and ramps up receipt of TRU waste shipments
- Completes design and begins construction on the new ventilation system and exhaust shaft

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

FY 2017 Enacted	FY 2018 Request
$194,000	$191,629

Key Accomplishments Planned for FY 2018

- Continues chromium plume investigation
- Completes town site cleanup of solid waste management units from the 1940s and 1950s production sites

Idaho National Laboratory, Idaho (Dollars in Thousands)

FY 2017 Enacted	FY 2018 Request
$382,088	$350,226[1]

Key Accomplishments Planned for FY 2018

[1] The amount reflects Defense Environmental Cleanup portion, the total Idaho National Laboratory FY18 Request is $359,226,000.

- Continues with the deliberate commissioning and start-up of the Integrated Waste Treatment Unit to treat liquid radioactive sodium bearing waste
- Continues buried waste retrieval activities
- Supports repackaging and the characterization of contact-handled transuranic waste at the Advanced Mixed Waste Treatment Project
- Treats and disposes mixed low-level and low-level waste offsite
- Maintains all dry spent nuclear fuel storage facilities

Oak Ridge Site, Tennessee (Dollars in Thousands)

FY 2017 Enacted	FY 2018 Request
$278,719	$225,205[2]

Key Accomplishments Planned for FY 2018

- Completes design and begins construction of the Mercury Treatment Facility
- Continues capital asset project to support processing U-233 materials
- Supports transuranic waste characterization and shipments to WIPP

Richland Operations Office, Washington (Dollars in Thousands)

FY 2017 Enacted	FY 2018 Request
$913,936	$798,192[3]

Key Accomplishments Planned for FY 2018

- Continues K Basin sludge removal and supports operations and maintenance of K West Basin
- Supports safe storage of nearly 2,000 cesium and strontium capsules in the Waste Encapsulation and Storage Facility, and continues project planning for dry storage options for the capsules
- Continues integration of site-wide groundwater and vadose zone cleanup activities, groundwater monitoring, operations, maintenance, and necessary modifications of existing remediation systems
- Continues soil and waste site remediation along River Corridor

[2] The amount reflects Defense Environmental Cleanup portion, the total Oak Ridge FY18 Request is $390,205,000.
[3] The amount reflects Defense Environmental Cleanup portion, the total Richland FY18 Request is $800,422,000.

Nevada National Security Site, Nevada (Dollars in Thousands)

FY 2017 Enacted	FY 2018 Request
$62,176	$60,136

Key Accomplishments Planned for FY 2018

- Completes characterization activities for six contaminated soil sites
- Completes closure activities for one soil corrective action site
- Supports cleanup activities across the DOE complex by providing disposal capacity and services for up to 1.2 million cubic feet of low-level and mixed low-level radioactive waste

Conclusion

Madam Chairwoman Fischer, Ranking Member Donnelly, and Members of the Subcommittee, I am honored to be here today representing the over 20,000 men and women that carry out the Office of Environmental Management mission. Our request will enable us to continue to make progress with our mission and to realize a significant set of accomplishments across the EM program. 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. All of this work will, first and foremost, be done safely, within a framework of best business practices. I am pleased to answer any questions you may have.