Testimony of William "Ike" White Senior Advisor for the Office of Environmental Management Before the Subcommittee on Strategic Forces Committee on Armed Services United States Senate April 18, 2023

Chairman King, Ranking Member Fischer, and Members of the Subcommittee, it is an honor to appear before you today to represent the Department of Energy's (DOE) Office of Environmental Management (EM).

EM's mission represents the government's strong commitment to cleaning up the environmental legacy of the national defense programs that helped end World War II and the Cold War. EM's vital mission does not just address past legacy, though, it also helps to support and enable DOE's ongoing national security and scientific research missions.

The Fiscal Year (FY) 2024 budget request of \$8.3 billion for EM reflects the Biden Administration's strong commitment to advancing the cleanup mission and preparing for sustained success, maintaining national security priorities, and supporting communities most impacted by the environmental legacy of the past.

Record of Results for the Environment

Over the last 30 years, EM has made significant progress. From an original 107 sites, today EM is down to just 15 with legacy cleanup work at the Brookhaven National Laboratory in New York completed last year. EM's significant accomplishments to date have included completing demolition of the Plutonium Finishing Plant, a facility that produced two-thirds of the nation's Cold War-era plutonium at the Hanford Site in Washington state; completing the removal of the former uranium enrichment complex at Oak Ridge in Tennessee; opening the world's only deep geological repository for transuranic waste generated from atomic energy defense activities at the Waste Isolation Pilot Plant in New Mexico; and completing construction on the entire tank waste treatment system at the Savannah River Site in South Carolina, enabling significant progress in how the Department tackles one of its largest environmental and financial liabilities at that site.

Delivering Results for DOE Sites and Communities

While the mission is rooted in the environmental legacy of the past, EM is also focused on the possibilities for the future. The EM program of today is empowered to strengthen local communities and the nation as a whole.

Enabled by the significant investments Congress has made in the program, EM has ushered in tangible results for communities and the environment in a safe, effective, and responsible manner. Over the past year, EM has cocooned the seventh reactor along the Columbia River at the Hanford Site in Washington state, leaving just one more to go. EM has also treated over 400,000 gallons of radioactive and chemical waste from large underground tanks at the Hanford Site where work is progressing towards initiation of the Direct Feed Low Activity Waste (DFLAW) project that will convert this waste into glass for disposal. At the Savannah River Site

in Aiken, South Carolina EM is now processing record amounts of tank waste with more than 2.1 million gallons treated last year alone.

More than 200 transuranic waste shipments were received last year at the Waste Isolation Pilot Plant (WIPP) in New Mexico from five generator sites. This includes shipments from the Los Alamos National Laboratory, where the EM team certified and completed 52 shipments to WIPP last year, surpassing goals by over 70 percent.

This Spring, EM met a key commitment to the state of Idaho by completing the transfer of EMowned spent nuclear fuel to on-site dry storage. Last week, workers safely and successfully started up the Integrated Waste Treatment Unit. This new tank waste treatment capability has been decades in the making and will ultimately help address one of the EM's greatest challenges in Idaho.

In addition, EM has launched demolition of the West Valley Demonstration Project's Main Plant Process Building, a priority that will continue this year and will further advance under the Fiscal Year 2024 budget request. The Nevada National Security Site is preparing to demolish four Test Cell C buildings this year and will continue to reduce the cleanup footprint there in Fiscal Year 2024.

EM continues a deliberate and broad view on the future of cleanup sites while contributing to national security priorities, investing in the next generation workforce and aiding Tribal and community efforts to build strong economies, grow jobs and prepare for a clean energy future.

Perhaps nowhere is this more evident than in Oak Ridge, Tennessee where historical cleanup accomplishments support national security priorities and are building up the clean energy economy in Tennessee. Following successful cleanup in the area, a commercial pilot fuel manufacturing facility is now open at the East Tennessee Technology Park. By putting DOE developed nuclear fuels research to work, this is a cleanup to clean energy success story. With the first-ever demolition of a reactor in the central campus area at the Oak Ridge National Laboratory (ORNL) and work continuing at the Y-12 National Security Complex, EM's steady progress is a part of a broader vision focused not only on cleaning up the past, but also advancing the ORNL and Y-12 research and national security research missions.

Steady Progress Planned for Fiscal Year 2024

The Fiscal Year 2024 budget request reflects the Administration's strong commitment to cleaning up the environment in communities that supported or continue to support weapons programs and government-sponsored nuclear research. Key investments position EM for sustained achievement as the program continues to drive risk reduction, progress skyline changes and ramp up efforts to tackle tank waste while enabling DOE's vital national security and scientific research missions.

Protecting the environment by addressing radioactive waste stored in underground tanks at Hanford, Savanah River and the Idaho National Laboratory is a top priority for EM. The budget request advances commissioning and startup of the Direct Feed Low Activity Waste system.

After decades of support from the local community, Congress and the workforce, this transformational accomplishment is within sight.

As we prepare to begin operating Hanford's low-activity tank waste vitrification capabilities, the budget request also invests \$600 million to ramp up work on the Waste Treatment Plant's High Level Waste facility to be able to tackle that portion of Hanford's tank waste inventory. In parallel, EM continues to identify safe, effective, and viable options for the treatment of all Hanford's tank waste.

Hanford's 56 million gallons of radioactive and chemical waste stored in 177 aging storage tanks represent EM's greatest environmental risk and financial liability. Recognizing that additional delays bring greater environmental risks, exacerbate the impacts of already aging infrastructure, and increase costs, we are focused on moving the entire Hanford tank waste mission forward. EM has also developed a Research and Development Roadmap to guide investments in additional technology options to accelerate the Hanford high-level tank waste mission. EM is also taking the next steps on the Test Bed Initiative Demonstration project, which could have the potential to safely pretreat low-activity waste from Hanford tanks, solidify the waste, and dispose of it off-site in a manner that is protective of the workers, the public and the environment.

In addition to helping solve the challenges of Hanford tank waste, the request will enable EM to continue meaningful cleanup progress to transfer radioactive capsules to safer dry storage, progress 324 Building waste excavation and treat another 2 billion gallons of contaminated groundwater.

In South Carolina, the Fiscal Year 2024 budget request supports continued utilization of capabilities to process tank waste. This advances work at the Savannah River Site to complete the bulk of its tank waste treatment mission.

At the Idaho National Laboratory, the request supports continued operations of the Integrated Waste Treatment Unit which will ultimately treat about 900,000 gallons of liquid waste by turning it into a granular solid.

Support for National Security Missions

In addition to reducing environmental risks at these and other sites across the complex, the EM mission benefits the Department's broader national security and scientific research missions.

Building on last year's successful demolition work, EM recently completed the transfer of the 18-acre Biology Complex at the Y-12 National Security Complex to the National Nuclear Security Administration (NNSA) which will use the area for a new Lithium Processing Facility. The budget request supports additional cleanup of high-risk excess facilities at the Oak Ridge National Laboratory and the Y-12 National Security Complex. It also supports work to advance the Mercury Treatment Facility and a second On-Site Waste Disposal Facility, both of which are pivotal to future efforts to reduce risks, stabilize facilities, advance cleanup and ultimately provide land for research and national security missions.

EM is in the midst of a significant infrastructure and modernization campaign at WIPP. Work continues on mining the West Access Drifts and sinking the utility shaft that is critical for ventilation upgrades needed to improve air quality in the underground portion of the site. Commissioning of the new Safety Significant Containment Ventilation System (SSCVS) is slated to begin this year. Along with providing for continued WIPP operations, as well as waste characterization and transportation programs, the budget request supports the continued infrastructure recapitalization projects, as well as mine modernization activities and safety upgrades in Fiscal Year 2024. Taken together these projects will help ensure EM has the infrastructure in place to support disposal operations for years to come.

At the Savannah River Site, where EM's role is decreasing as cleanup work progresses, a joint process to transition primary authority for the site to NNSA in Fiscal Year 2025 is underway. EM and NNSA are committed to a successful transition that keeps national security priorities as well as the long-term outlook for the site and community front of mind.

Investing in Diverse Workforce and Communities

The talented and dedicated men and women across EM are the program's greatest assets. While significant progress continues across the DOE complex, the EM mission will span several decades at some sites. With that in mind, EM is increasing efforts to foster, build and maintain a next-generation workforce that promotes diversity, equity, inclusion, and accessibility. A program-wide succession plan has been developed to help identify and develop the next generation of program leaders. EM has expanded the Minority Serving Institutions Partnership Program to increase internships, develop a new technology curriculum, and boost research activities. Funding has been provided to participants across the country in states like Washington, Nevada, Tennessee, South Carolina and others. The budget request provides \$56 million to continue the Minority Serving Institutions Partnership Program.

The Advanced Manufacturing Collaborative facility, to be constructed in South Carolina, will be another tool to help meet the needs of the EM cleanup mission and create an environment to develop a diverse and talented next generation workforce. In addition, EM is putting DOE's Justice40 Initiative to work by expanding outreach and grants to include support for STEM and Community Based Education programs.

The Justice40 Initiative has also provided new opportunities to boost engagement with stakeholders and ensure the voice of those most impacted by the EM mission is heard. In addition, EM has increased stakeholder outreach and engagement across the complex, with particular emphasis in New Mexico, where we have partnered with NNSA to hold multiple public forums and prioritize meetings with state, local, and Tribal leaders.

The FY 2024 request represents a significant investment in helping the communities that played such an important role in US history continue to grow and thrive in the future. The request includes Payment in Lieu of Taxes funding for communities near Hanford and Savannah River to support schools, roads and other local priorities. In addition, \$40 million is provided for the Community Capacity Building initiative. This grant program will provide assistance to those communities around EM sites and will be developed in consultation with community

stakeholders to address their needs. By partnering with local communities, prioritizing stakeholder engagement and implementing environmental justice initiatives, EM is helping to foster successful visions for the future.

Conclusion

The FY 2024 budget request is the latest sign of this Administration's strong support for EM's vital mission. As the mission is carried out, EM is committed to continuous improvement and making further advancements to ensure that cleanup activities are conducted in a safe, efficient, and cost-effective manner.

Across mission areas, EM utilizes science-based advancements that provide opportunities to meet cleanup commitments safely, sooner and more efficiently. EM is leveraging the expertise of the Savannah River National Laboratory and the Network of National Laboratories for Environmental Management and Stewardship to develop innovative solutions in the fields of environmental cleanup, national security and science and energy security that will benefit EM, the NNSA and other DOE missions. Our goal is a fully integrated technology program that enables EM to better meet the most complex challenges of today and tomorrow.

Whether it is investing in R&D, analyzing disposal options, reaching decisions about remaining waste streams, achieving regulatory alignment, or upgrading infrastructure, EM is preparing for the future. These multi-faceted activities are laid out in EM's annual priorities list and 10-year strategic vision as part of EM's ongoing efforts to improve prioritization, planning and mission execution.

As EM makes steady cleanup progress, EM is committed to working in a collaborative manner with workers, unions, Tribal Nations, states, local communities, and Congress on opportunities to achieve shared goals of protecting the environment and preparing for continued cleanup success.