

Written Statement of William “Ike” White

Acting Assistant Secretary for Environmental Management

Before the Subcommittee on Strategic Forces Committee on Armed Services

United States Senate

May 19, 2021

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 is charged with fulfilling the responsibility to clean up the environment in communities that supported national defense weapons programs and government-sponsored nuclear energy research so they can continue to grow and thrive in the future. The mission carried out by EM represents a strong commitment to cleaning up the environmental legacy of the national defense programs that helped end World War II and the Cold War.

Delivering on Key Priorities

As the largest environmental cleanup program in the world, EM has played a key role in the Department’s overarching mission to protect the planet for over 30 years. Over that time, EM has made significant progress, completing cleanup activities at 91 out of a total of 107 sites. EM’s significant accomplishments to date have included completing the bulk of cleanup activities along the 220-square mile Columbia River Corridor at the Hanford site in Washington state; completing 25 years of successful operations at the Defense Waste Processing Facility to help address tank waste at the Savannah River Site in South Carolina; completing the processing of 65,000 cubic meters of legacy transuranic waste at the Idaho Cleanup Project for off-site disposal; and opening the world’s only deep geological repository for defense-related transuranic waste at the Waste Isolation Pilot Plant (WIPP) in New Mexico.

Even as EM grappled with the challenges of the COVID-19 pandemic, 2020 represented an inflection point for many sites across the program. The dedication and resiliency of the EM workforce resulted in a ramp up in transformational tank waste capabilities, historic skyline changes, a shrinking cleanup footprint and contracts that accelerate progress. Key accomplishments were achieved across EM, some years in the making, that position the Department for building momentum for continued progress. These included:

- Completing the Vision 2020 initiative at the Oak Ridge site in Tennessee. This effort entailed the demolition of more than 500 structures totaling 13 million square feet at the East Tennessee Technology Park, and marked the first complete removal of a former uranium enrichment complex in the world.

- Initiating operations of the Salt Waste Processing Facility (SWPF) at the Savannah River Site. The SWPF is the last major component of the tank waste cleanup system at Savannah River, and its operation will provide a transformative leap forward in EM's ability to address a key environmental risk at the site.
- Completing construction of those facilities at Hanford involved in the Direct Feed Low Activity Waste (DFLAW) system for waste treatment. This positions EM to be able to initiate tank waste treatment at Hanford in the near-term. In addition, EM completed the demolition of the iconic Plutonium Finishing Plant, once one of the highest-risk facilities in the DOE complex.
- Completing environmental remediation and restoration work at the Tonopah Test Range in Nevada and at the Separations Process Research Unit in New York state enabling this land to be transferred out of the EM program.

Building on this strong record of results, EM is entering a new era of cleanup progress. EM has an ambitious set of priorities for 2021 that will result in a ramp up in the ability to tackle radioactive waste stored in underground tanks, as well as skyline changes at some sites; continued progress in key infrastructure improvements at the Waste Isolation Pilot Plant (WIPP) to position the site to continue to support DOE's legacy cleanup and ongoing national security missions; and progress in a variety of risk reduction efforts.

Already this year, EM teams on the ground have ensured that three underground structures at Hanford are in stable condition, demolished one of the final remaining buildings at the former Biology Complex at the Y-12 National Security Complex in Oak Ridge and progressed infrastructure enhancements the Nevada National Security Site Area 5 Radioactive Waste Management Complex.

Reducing Environmental Risks

As EM enters a new era, built on the strong progress of our workforce the Department of Energy is well positioned to tackle the tough challenges of addressing radioactive waste stored in underground tanks, demolishing contaminated buildings, remediate contaminated soil and groundwater, safely managing and disposing of waste, and ultimately closing out cleanup sites. In this new era, EM is focused on protecting the environment by reducing risks, supporting the broader DOE national security missions and preparing for the future of the cleanup mission.

Protecting the environment by addressing radioactive waste stored in underground tanks at the Hanford site, the Savannah River site and the Idaho National Laboratory site is a top priority for EM. After decades of preparations, the Hanford site is on the precipice of initiating tank waste treatment in a few short years via the Direct-Feed Low Activity Waste (DFLAW) system. EM is on track for initiating radioactive tank waste treatment at Hanford by the end of 2023. Upcoming activities in advancing the DFLAW system include cold commissioning with simulated tank waste, startup of the melters that will turn treated waste into glass and other tests needed before initiating tank waste treatment. In order to ensure the safe condition of all underground waste

tanks at Hanford, EM also maintains a robust Tank Integrity Program, which is important for monitoring the condition of all underground waste tanks at Hanford.

The EM team at Hanford is also continuing key risk reduction activities to protect the Columbia River including groundwater treatment systems, work to prepare Building 324 for demolition, and steps toward the ultimate stabilization of the final two of nine Hanford reactors. The initiative to transfer radioactive capsules to safer dry storage is also continuing.

In South Carolina, the tank waste treatment mission is accelerating through operation of the Salt Waste Processing Facility and the Defense Waste Processing Facility. A high state of readiness for H Canyon at the Savannah River Site is being maintained. Additional risk reduction work is continuing including work towards disposition of remaining transuranic waste and remediating contaminated soil and groundwater.

At the Idaho National Laboratory, EM is working toward start-up of the Integrated Waste Treatment Unit (IWTU). Once operational, the IWTU will turn about 900,000 gallons of liquid waste into a granular solid. Other risk reduction work includes progress towards completion of targeted waste exhumations at the Accelerated Retrieval Project as well as treatment of contact-handled sludge waste. As these projects advance, work will begin to start decontamination and decommissioning of the Advanced Mixed Waste Treatment Project.

Supporting 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. Nowhere is this more evident than at Oak Ridge. Oak Ridge is transitioning its highly skilled and experienced workforce from the successful demolition of the former uranium enrichment complex at the East Tennessee Technology Park to begin major cleanup operations at the Oak Ridge National Laboratory and Y-12 National Security Complex. EM is advancing progress on several near-term priorities at Oak Ridge: disposition of the remaining uranium-233 inventory at the Oak Ridge National Laboratory, addressing transuranic debris and sludges, completing remaining soil cleanup activities at the East Tennessee Technology Park, construction of the Mercury Treatment Facility at the Y-12 National Security Complex and deactivation of former process buildings.

Key modernization and infrastructure recapitalization priorities continue at WIPP, a facility that is essential for the disposal of defense-related transuranic waste, aiding not only legacy cleanup activities but ongoing national security programs. These priorities will help ensure WIPP is equipped to meet the needs of the national transuranic waste disposal mission today and into the future.

EM is also pursuing a world-class technology development program to help tackle remaining technical challenges and advance and accelerate the overall cleanup mission. The expertise of the Savannah River National Laboratory (SRNL) is working to develop innovative solutions in the fields of environmental cleanup, national security and science and energy security. EM, the

National Nuclear Security Administration and other DOE missions will benefit from anticipated growth of the Laboratory under the recently awarded stand-alone Management and Operating contract.

Strategic Planning for New Era of Cleanup

With a mission that will span several decades at some sites, EM is taking steps to ensure a successful and sustainable program that will enable mission completion. EM is undertaking a rational planning approach that will boost the Department's ability to both continue making impactful progress in the short term, and advance toward achieving longer-range mission goals.

EM has an ambitious slate of priorities that cover not only this year, but span the next decade as outlined in its Strategic Vision, a document that provides a clear, concise roadmap to guide priorities through 2031, including completing legacy cleanup activities at four sites including the Nevada National Security Site.

In order to support this long-term sustainable progress, EM is investing in our team to support workforce development and building a workforce that promotes diversity and inclusion. That includes opening up high-quality job opportunities. The Minority Serving Institutions partnership program run through the Savannah River National Laboratory is a part of this overarching effort.

Putting EM Investment to Work

DOE is putting the federal investment in EM to work to continue advancing the cleanup mission. As that work is carried out, a safety-first culture will be paramount, clean up decisions will be based on sound science and informed by input from a diverse range of stakeholders and the states, tribes and communities most directly impacted by the environmental legacy of the past will have a seat at the table.

The EM program is fortunate to have the strong support of the Energy Secretary and the new DOE leadership team. Most important to our success in the new era for cleanup are the talented and dedicated men and women across the entire EM program. They share the commitment of DOE and EM leadership to this vital mission.

EM will work hand-in-hand with workers, unions, tribal nations, states, local communities, and Congress as progress continues and plans are developed for this next era of cleanup and beyond.

| | FY 2020 Enacted | FY 2021 Enacted |
|--|--------------------|--------------------|
| Carlsbad | 403,599 | 420,066 |
| ETEC | 18,200 | 12,000 |
| Idaho | 446,300 | 444,500 |
| Los Alamos | 220,000 | 226,000 |
| Lawrence Livermore | 66,727 | 36,764 |
| Lawrence Berkeley | 31,000 | 30,100 |
| Moab | 45,000 | 47,833 |
| Nevada | 60,737 | 60,737 |
| Oak Ridge | 682,348 | 644,344 |
| Richland | 1,001,301 | 1,024,900 |
| River Protection | 1,616,000 | 1,645,000 |
| Paducah | 314,339 | 315,885 |
| Portsmouth | 493,427 | 508,864 |
| Savannah River | 1,629,924 | 1,702,870 |
| SPRU | 15,300 | 15,000 |
| Sandia | 2,652 | 4,860 |
| West Valley | 79,611 | 92,411 |
| Defense Closure Site Activities | 4,987 | 4,987 |
| Non-Defense Closure Site Activities | - | - |
| Program Direction | 281,119 | 289,000 |
| Mission Support Activities | 14,179 | 15,079 |
| Technology Development | 25,000 | 30,000 |
| Excess Facilities | 10,000 | 10,000 |
| Use of Mercury Receipts | - | 3,000 |
| Uranium Thorium Reimbursements | 5,250 | 5,000 |
| D&D Fund Deposit | - | - |
| Subtotal, EM | 7,467,000 | 7,589,200 |
| UED&D Fund Offset | - | - |
| 15-D-401 Containerized Sludge Removal (RL) | (11,800) | - |
| Use of Mercury Receipts | - | (3,000) |
| Total, EM | 7,455,200 | 7,586,200 |