

**Written Statement of Anne Marie White**  
**Assistant Secretary for Environmental Management**  
**Before the Subcommittee on Strategic Forces Committee on Armed Services**  
**United States Senate**  
**May 8, 2019**

Chairman Fischer, Ranking Member Heinrich and Members of the Subcommittee, thank you for the opportunity to appear before you 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 planned accomplishments through the President's Fiscal Year 2020 Budget request of \$6.5 billion, which includes \$5.5 billion in Defense Environmental Cleanup funding.

The request demonstrates the Administration's continued commitment to the vital mission of EM to address the environmental legacy of nuclear weapons production that helped end World War II and the Cold War.

This legacy is one that includes challenges like the safe disposition of radioactive wastes; the management of spent nuclear fuel and special nuclear material; the cleanup of contaminated soil and groundwater; and the decontamination and decommissioning (D&D) of thousands of excess facilities.

Madam Chair, this year marks the 30<sup>th</sup> anniversary of the EM program. Since its inception, our dedicated workforce has worked effectively to reduce the footprint of the cleanup program from 107 sites comprising a total of 3,100 square miles to just 16 sites, with an active cleanup footprint of less than 300 square miles.

While it does not always make headline news, we are sustaining progress at each of our EM sites, and we have realized a set of key accomplishments over the past year.

Last month I was out in New Mexico with Ranking Member Heinrich to mark the 20<sup>th</sup> Anniversary of the Waste Isolation Pilot Plant (WIPP), our key facility for final disposition of transuranic waste across the EM complex.

I had the opportunity to see firsthand progress on a number of vital infrastructure projects at WIPP, which include upgrades to electrical, fire suppression, and compressed air systems.

From there I headed to Los Alamos where I received an update on the early success of the chromium plume interim measure.

Over the past year, EM took another significant step towards large-scale cleanup at the Y-12 site in Oak Ridge, Tennessee, by removing over 3 tons of mercury from equipment and completing all of the site preparation required for construction of the new Mercury Treatment Facility. This vital infrastructure will help EM fulfill a commitment with the U.S. Environmental Protection Agency (EPA) and the State of Tennessee to reduce the levels of mercury leaving the Y-12 facility.

[Workers in South Carolina consolidated more than 400,000 cubic yards of coal ash and ash-contaminated soil at the Savannah River Site.](#) They completed it safely and 14 months ahead of schedule, saving \$9 million.

For the first time in the history of the [Savannah River Site](#) (SRS), EM is processing two salt waste streams at the site. With help from the parallel processing streams, now more than 10 million gallons of salt waste have been processed since salt-decontamination operations began at SRS. The waste is being processed through two salt-decontamination operations: an integrated interim salt processing operation called the Actinide Removal Process and the Modular Caustic Side Solvent Extraction Unit, and a newly implemented process called Tank Closure Cesium Removal.

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At Hanford, EM continued hot cell cleanup and workers began installing equipment to excavate highly contaminated soil under the 324 Building. This facility operated from 1966 to 1996 and supported research involving radioactive materials.

From my time in industry, I understand where cleanup work gets done. It is out in the field. Our men and women on the ground are doing a great job and making progress—but we must do more.

Despite this great work and the important federal investment year after year, EM faces significant challenges. Cleanup progress is being significantly outpaced by environmental liabilities.

Even with significant budgets, EM is swimming upstream as we gear up to tackle some of our remaining toughest challenges. Simply throwing more taxpayer dollars into EM will not address these challenges.

This Administration, and the Secretary of Energy's senior leadership team are taking action to ensure the sustainability of the EM program and address issues long-raised by the Government Accountability Office.

Since the inception of the EM program, our knowledge and technology have matured significantly. We need to employ a sustainable completion-centric cleanup approach, using the latest knowledge in waste composition, risks, and attainable end states. We need to pursue cleanup in a manner that properly incentivizes performance, strengthens oversight, and delivers results.

EM is committed to working in a collaborative manner with Congress and others toward a future that will not simply enable the cleanup program to continue – but will propel the mission forward and drive it toward completion and closure. The Subcommittee will see EM focus on strengthening program management, oversight, and accountability to ensure value for the American taxpayer.

That starts with abandoning vague notions of our challenges and truly getting to the bottom of what we are dealing with using accurate up-to-date information.

Work must be prioritized based on real risks and sound science, rather than perceived risks or soundbites.

There are some real potential improvements for how EM treats and disposes of waste safely, quickly, and cost-effectively. The Department has a responsibility to carefully evaluate these options, including new technologies, treatment options, and disposal capabilities that did not exist when cleanup plans were first developed.

To that end, EM is looking 10 years out at what the barriers are and how they could be mitigated for faster completion. We are developing site options analyses to identify opportunities to complete cleanup work through more efficient, innovative, or novel approaches over the next decade. This includes considering the range of possibilities in terms of what could be achieved at sites across the complex if we are willing to reassess our assumptions, consider new approaches and disposal options, and just think outside the box.

EM will soon complete site options assessments and we look forward to engaging with Congress as well as stakeholders and regulators throughout the cleanup community on the best ways to move forward.

As announced in a Federal Register notice in October 2018, the Department is evaluating its interpretation of the statutory term high-level radioactive waste. In the notice, the Department sought public comment on an interpretation that would classify high-level radioactive waste based on its actual radiological content and associated risks rather than solely on the source of the waste. If implemented, this would bring the U.S. more in line with the rest of the world, and be consistent with many reports and recommendations from wide-ranging and non-partisan outside groups. It is important to note this is the first step in a process that must comply with existing programmatic and regulatory requirements and law. The Department's consideration of a new interpretation does not alter or abrogate the Department's responsibilities or policies under existing regulatory requirements or agreements.

EM is also taking steps to get the best value out of every cleanup dollar that Congress provides.

Consistent with the Deputy Secretary's initiative on regulatory reform, I have directed staff and the field to look at opportunities for change.

Based on my experience in the field, this will lead to an enhanced safety culture because many of the reforms are common sense approaches that can streamline our work.

EM is focused on driving down the operating and maintenance costs for its facilities, which represent a significant portion of EM's annual budget that could otherwise be used for actual cleanup work.

As project lifecycle schedules drag out, aging facilities' components and equipment are stretching resources. We can either invest money towards cleanup or we can maintain aging facilities and build new facilities, but we cannot do it all.

One of the most transformative initiatives is in the area of contracting. EM has billions of dollars in procurements coming up at some of our largest sites over the next few years, representing a significant opportunity to improve our procurement processes, contract management, and oversight performance.

In February, the Department released Final Requests for Proposals for the first two contracts that are representative of this new “end-state contract” model. Proposals from offerors are currently being evaluated for award later this summer.

End-state contracting is not a contract type but an approach to creating meaningful and visible progress through defined end-states, even at sites with completion dates far into the future. This is intended to create and motivate a culture of completion.

Madam Chair, this new approach to procurement; the discussions we are having on the regulatory front; the ongoing options analyses; and the funding proposed in the Fiscal Year (FY) 2020 budget request, will yield impactful results.

The FY 2020 budget request for EM is \$6.5 billion, which includes \$5.5 billion for defense environmental cleanup activities; \$247 million; for non-defense environmental cleanup activities; and \$715 million for Uranium Enrichment Decontamination and Decommissioning Fund cleanup activities.

As EM is put on a sustainable path forward, the FY 2020 budget request provides the resources to build upon recent successes, bring a renewed sense of urgency to the program, and enable meaningful, measurable progress to projects and sites throughout the cleanup complex.

From day one, the Secretary of Energy has made the environmental cleanup mission a key priority for the Department of Energy.

EM’s 2020 budget request provides the resources to make progress on cleanup activities across the complex, including increasing efforts to address radioactive tank waste at the Savannah River Site through start-up of the Salt Waste Processing Facility and continued construction activities for Saltstone Disposal Units.

At Hanford’s Office of River Protection, the budget drives the focus on the Direct Feed Low Activity Waste approach to initiate tank waste treatment by December 2023.

Resources are also provided for Hanford’s Richland Operations Office for work on River Corridor decontamination and decommissioning activities including remediation of the highly contaminated 300-296 waste site under the 324 Building.

At Oak Ridge, the request advances construction on the Outfall 200 Mercury Treatment Facility, continues deactivation and demolition of remaining facilities at the East Tennessee Technology Park, and continues preparation of Building 2026 to support processing the remaining U-233 material at the Oak Ridge National Laboratory.

The budget includes funding to initiate two transuranic waste processing lines, complete characterization of the high explosives plume in Canon de Valle, and implement the full interim measure for the chromium plume at Los Alamos in New Mexico.

At SPRU in New York, EM would be able to complete verification of cleanup, site restoration, and closeout activities.

Together, these investments for environmental management will enable EM to make significant progress in fulfilling its cleanup responsibilities.

EM’s greatest successes have historically been achieved through the hard work and dedication of leaders on both sides of the aisle who are determined to get big things done. I want to express my desire to work with the Congress towards a future that propels the EM mission forward and drives cleanup toward safe completion, sooner, and in a cost-conscious manner.

**Budget Authority and Planned Accomplishments for Selected Sites  
(Dollars in Thousands)**

**Office of River Protection, Washington**

FY 2019 Enacted	FY 2020 Request
1,573,000	1,392,460

Key Accomplishments Planned for FY 2020

- Initiate cold commissioning of the Waste Treatment and Immobilization Plant to support Low Activity Waste Facility hot commissioning and production operations by December 31, 2023.
- Design and construct tank farm facility upgrades (i.e. 222-S Laboratory, 242-A Evaporator and the Effluent Treatment Facility) for staging waste in 2021 for Waste Treatment Plant operations.
- Incorporate lessons learned from Savannah River cesium processing to facilitate fabrication, testing and delivery of the Tank-Side Cesium Removal System to pretreat waste for the LAW Facility.
- Perform tank integrity activities to ensure adequate double shell tank space is available for Direct Feed Low Activity Waste (DFLAW) operations and AX retrievals.

- Complete retrieval of single shell tank AX-102 by 2021 in support of the corresponding Consent Decree milestone.
- Advance a production-scale offsite disposition path for tank waste. utilizing the regulatory pathways created by Test Bed Initiative
- Hanford Tank Closure End-State Contract scheduled for award in Q4 2019 incentivizes risk-based cleanup that reduces financial liability.

### **Richland Operations Office, Washington**

FY 2019 Enacted	FY 2020 Request
954,097	718,098

#### Key Accomplishments Planned for FY 2020

- Reduce risk and facility costs by supporting construction activities for future relocation of Cesium & Strontium capsules to dry storage by the Tri-Party Agreement (TPA) due date of August 2025.
- Shrink the extent of radiological and chemical contamination in groundwater at Hanford through treatment of 2.2 billion gallons.
- Complete 324 Building structural modifications, removal of the hot cell floor, and readiness review activities for start of soil removal for remediation of the 300-296 waste site below the building.
- Hanford Central Plateau Cleanup End-State Contract scheduled for award in Q4 2019 incentivizes risk-based cleanup that reduces financial liability.

### **Savannah River Site, South Carolina**

FY 2019 Enacted	FY 2020 Request
1,551,014	1,642,509

#### Key Accomplishments Planned for FY 2020

- Complete removal of material-at-risk from Building 235-F which addresses remaining activities in accordance with Defense Nuclear Facilities Safety Board Implementation Plan to reduce residual Plutonium 238.
- Liquid Waste/Salt Waste Processing:
  - Supports Salt Waste Processing Facility (SWPF) start of radioactive operations necessary to meet State commitments and advance completion of cleanup mission

- Enables waste removal preparation activities required to support SWPF planned operations rate greater than current rate for salt waste processing, allowing tank closure to proceed at a more rapid pace.
- Continues construction of Saltstone Disposal Unit 7 and initiate construction of Saltstone Disposal Units 8/9 and design of Saltstone Disposal Units 10-12 to support SWPF planned rates.
- Funding to initiate the Savannah River National Laboratory's Advanced Manufacturing Collaborative facility (AMC)

**Idaho National Laboratory, Idaho**

FY 2019 Enacted	FY 2020 Request
443,200	347,654

Key Accomplishments Planned for FY 2020

- Complete exhumations at Accelerated Retrieval Project area in support of meeting regulatory milestone to retrieve, process and dispose of targeted buried waste by 2023.
- Initiate hot operations of Integrated Waste Treatment Unit, pending successful demonstrations of the phase 2 simulatant run number 3 and phase 3 performance run, to begin treating liquid sodium-bearing waste leading to closure of the final 3 liquid waste tanks.
- Complete processing and packaging of legacy transuranic waste so that it is ready for certification and shipment.
- Idaho Cleanup Project End-State Contract scheduled for award in Q2 2020 incentivizes risk based cleanup that reduces financial liability.

**Oak Ridge Site, Tennessee**

FY 2019 Enacted	FY 2020 Request
646,281	428,875

Key Accomplishments Planned for FY 2020

- Complete demolition of 90% of East Tennessee Technology Park facilities and continue environmental remediation work.
- Complete processing contact-handled and remote-handled legacy transuranic debris waste inventory.
- Complete construction of transuranic sludge processing test area.
- Complete preparation of Building 2026 for processing remaining U-233 material.
- Complete second of four years of construction of the Mercury Treatment Facility.

- Complete preliminary design and early site preparation of On-Site Comprehensive Environmental Response, Compensation, and Liability Act Disposal Facility.
- Oak Ridge Reservation Cleanup Contract End-State Contract scheduled for award in Q3 2020 incentivizes risk based cleanup that reduces financial liability.

**Carlsbad Field Office, New Mexico**

FY 2019 Enacted	FY 2020 Request
403,487	398,334

Key Accomplishments Planned for FY 2020

At Waste Isolation Pilot Plan (WIPP):

- Support receipt of up to 10 shipments of transuranic waste per week.
- Continue construction progress on Safety Significant Confinement Ventilation System (15-D-411) and on Utility Shaft (formerly Exhaust Shaft) (15-D-412).
- Complete two infrastructure recapitalizations (public address system and electrical substations).

**Los Alamos National Laboratory, New Mexico**

FY 2019 Enacted	FY 2020 Request
220,000	195,462

Key Accomplishments Planned for FY 2020

- Commence operations in two (of three planned) TRU processing lines to treat waste for shipment to WIPP.
- Reduce risk by completing ~50 shipments of TRU waste to WIPP.
- Complete characterization of RDX (high explosives) plume beneath Cañon de Valle and continue activities to determine final remedy.
- Prevent migration of Chromium plume offsite by implementing a hydraulic barrier.
- Continue investigation and cleanup activities required to meet Consent Order milestones.
- Continue groundwater and surface water sampling to remain compliant with the Consent Order and Individual Permit.

## Nevada National Security Site, Nevada

FY 2019 Enacted	FY 2020 Request
60,136	60,737

### Key Accomplishments Planned for FY 2020

- Complete closure of Corrective Action Unit (CAU) 97 Yucca Flat/Climax Mine.
- Complete 3% for a total of 66% towards the closure of CAUs 101/102 Central and Western Pahute Mesa.
- Initiate and complete 18% towards the installation of 4 post-closure monitoring network wells for CAUs 97 Yucca Flat/Climax Mine and 99 Rainier Mesa/Shoshone Mountain.
- Conduct annual post-closure monitoring and maintenance of 197 closed-in-place contaminated soil and industrial-type sites.
- Conduct annual post-closure sampling, monitoring and maintenance at 16 well locations associated with 76 closed-in-place contaminated groundwater sites.
- Operate DOE-owned waste disposal facility with the capability to receive between 1.2 to 1.5million cubic feet of low-level and mixed low-level waste in support of cleanup activities across the DOE complex.
- Maintain Nevada's Agreements in Principal and grants and provide funds for the Low-Level waste fee agreement.
- Nevada Environmental Program Multiple Award Small Business End State Contract scheduled for award in Q2 2020 incentivizes risk based cleanup that reduces financial liability.