

**Testimony of James Owendoff**  
**Principal Deputy Assistant Secretary for Environmental Management**  
**Before the**  
**House Committee on Energy and Commerce**  
**Subcommittee on Energy**  
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Chairman Upton, Ranking Member Rush and distinguished members of the committee, I appreciate the opportunity to appear before you today to discuss the Department of Energy's Environmental Management program.

The federal government's nuclear weapons production programs have made significant contributions to our nation's defense for decades – helping end World War II and the Cold War. In addition, government-sponsored nuclear energy research also made significant contributions to domestic energy growth and prosperity. The legacy of these programs is a massive amount of radioactive and chemical waste and contaminated facilities at sites across the country. It is the mission of DOE's Office of Environmental Management (EM) to clean up or remediate this legacy waste.

EM Overview

This legacy includes 90 million of gallons of radioactive liquid waste stored in aging underground tanks. That's enough to completely fill the Capitol Rotunda nearly 10 times.

This legacy also includes five thousand contaminated facilities, 700,000 tons of depleted uranium, millions of cubic meters of contaminated soil, billions of gallons of contaminated water, spent nuclear fuel and other nuclear materials.

EM must execute its mission as safely, efficiently and cost-effectively as possible. This involves constructing new infrastructure like waste storage facilities and waste treatment plants. This mission also involves the management and retrieval of liquid tank waste as well as the decommissioning and demolition of deteriorating facilities that ultimately reduce maintenance and monitoring costs.

EM's first priority is worker safety, as well as protection of the public health and the environment. These are essential components of our cleanup objectives. EM will continue to discharge its responsibilities by conducting cleanup within a "Safe Performance of Work" culture that integrates protection of the environmental, safety, and protection of worker and public health 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 receipt, storage, and disposition;
- Special nuclear material consolidation, stabilization, and disposition;
- Transuranic and mixed/low-level waste treatment and disposal;
- Soil and groundwater remediation; and,
- Excess facilities deactivation and decommissioning.

Approximately 90 percent of the EM budget is contracted out, largely on a competitive basis. This work directly employs more than 25,000 Americans.

### EM Funding

In Fiscal Year 2018, approximately 37 percent of EM's budget request of \$6.5 billion went toward tackling our largest environmental challenge: radioactive tank waste. Facility deactivation and decommissioning accounted for 18 percent, and transuranic and solid waste treatment and disposal accounted for 13 percent. Special nuclear materials disposition and spent nuclear fuel management accounted for approximately 8 percent, and soil and groundwater remediation accounted for approximately 7 percent. Site Services accounted for 17 percent.

Across these programmatic areas, it is important to note that approximately \$3.1 billion, or 48 percent, goes towards maintaining our facilities across the complex in a safe operational ready stance. This includes activities such as facility infrastructure maintenance and complex-wide safeguards and security and cyber security activities. The scope of these activities covers security of special nuclear materials and safety of high-level radioactive waste and spent nuclear fuel, along with maintenance of thousands of square feet of deteriorating nuclear processing facilities awaiting eventual future demolition.

Mr. Chairman, I recognize and appreciate the funding Congress provides for the EM program each year. This federal investment, while necessarily substantial, is a smart one – helping to protect public safety and the environment.

### Cleanup Progress

The nature and length of the EM mission, coupled with the sheer technological complexity of cleanup means that we will always face challenges – some anticipated and others unexpected. These obstacles certainly warrant our careful attention, but EM also has a proven ability to achieve tangible results.

When the program began in 1989, EM was responsible for a total of 107 sites covering 3,100 square miles. That's an area larger than Rhode Island and Delaware combined. During early years, work focused on characterizing waste. Since then, EM has accomplished 1) cleanup and closure of major sites in Colorado, Ohio, Missouri and Florida; 2) decommissioning of a gaseous diffusion enrichment plant in Tennessee; 3) vitrification of more than 4,000 canisters of high-

level waste in South Carolina; and ) removal of all the plutonium metal and oxides from Washington state.

Today, EM has 16 sites remaining, with an active cleanup footprint of less than 300 square miles. These 16 sites are home to some of our toughest and most complex challenges.

The best value does not mean taking short cuts and it does not always mean choosing the cheapest option. It means getting the job done as safely, efficiently and cost-effectively as possible. It requires a sustainable, risk-informed approach centered on reducing the greatest amount of risk with the resources available, while maximizing opportunities to shorten schedules and lower lifecycle costs.

That is why I have focused on a greater sense of urgency to EM's decision-making process. This approach means more emphasis on engaging with regulators, stakeholders, and communities in making timely decisions which will enhance safety, shorten schedules, increase transparency, and reduce costs – achieving the best value for all taxpayers, while at the same time, protecting our workers, members of the public in the communities surrounding our sites, and the environment.

### 2017 Accomplishments

While some cleanup projects will extend decades, stable steady progress is being made right now. In 2017, the EM workforce achieved the resumption of transuranic waste shipments to the Waste Isolation Pilot Plant, enabling continued cleanup progress at several sites across the country.

We also completed cleanup activities at Hanford's 618-10 burial ground; demolition of one of the last remaining buildings at the Separations Process Research Unit in New York state; and the safe treatment of remediated nitrate salt drums at the Los Alamos National Laboratory. At Savannah River, workers successfully completed construction of the latest Saltstone Disposal Unit, which is integral to the tank waste cleanup mission. At the Portsmouth site, we are continuing work to deactivate the former enrichment plant's massive process buildings to prepare them for eventual demolition. At the Paducah site, we have optimized a system to control and mitigate the migration of groundwater contamination on the east side of the site ahead of schedule and under budget.

Our successes have been recognized by the Project Management Institute (PMI). Our work to complete waste retrieval activities at the AY-102 double-shell tank at Hanford was awarded PMI's Project of the Year award. In addition, PMI also issued awards for efforts to upgrade a ventilation system at one of Hanford's tank farms and for work to close one of the underground waste tanks at the Savannah River Site. I am proud that the PMI chose to recognize the important work underway to address one of our largest environmental challenges — radioactive tank waste. These awards are a recognition of the dedicated and talented workforce we have at the Hanford and Savannah River sites, and across the entire EM program, and illustrate how the EM program is working to serve as a good steward of taxpayer resources. I am committed to building upon this cleanup momentum, Mr. Chairman.

### Achieving Continued Success

Ensuring there is an essential safe work environment at all of our sites is our highest priority. As we work to best position EM for success now and into the future, we will also continue to pursue robust technology development, and infrastructure investments that ensure safe and uninterrupted operations.

The recent Department of Energy reorganization aids these efforts through improved alignment of EM, the Office of Science, and our national labs. By leveraging the expertise of the national lab complex and exploring potential project management and contract approaches used by the Office of Science, we will be better positioned to solve complex challenges, manage costs and ensure the highest level of safety at our sites.

At the end of the day, EM progress means safer, cleaner sites in the communities that hosted defense nuclear activities for decades. This kind of progress is not possible without our workforce, Members of Congress, regulators, cleanup community leaders and other partners.

Mr. Chairman, I welcome the input of the Committee as EM continues work on aggressive achievable cleanup plans that recognize the difficult technical challenges, while making substantial progress on the many goals we share with you and your constituents.

Thank you for the opportunity to appear before you today and I look forward to your questions.