



**TESTIMONY  
ON BEHALF OF THE ENERGY COMMUNITIES ALLIANCE**

**OF**

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**BEFORE THE  
SUBCOMMITTEE ON  
THE INTERIOR, ENERGY, AND ENVIRONMENT  
HOUSE OVERSIGHT AND GOVERNMENT REFORM COMMITTEE  
UNITED STATES HOUSE OF REPRESENTATIVES**

**REGARDING**

**“EXAMINING AMERICA’S NUCLEAR WASTE MANAGEMENT AND  
STORAGE”**

**SEPTEMBER 26, 2017**

Chairman Farenthold and members of the subcommittee, I thank you for inviting me to testify today, ensuring that the perspective of the local communities that host the government's defense nuclear waste facilities is represented in discussions of how best to manage and dispose of the nation's nuclear waste.

I am Chuck Smith, Council Member of Aiken County, South Carolina, board member of the Savannah River Site Community Reuse Organization, and Chairman of the Energy Communities Alliance (ECA), the only national organization of local, elected and appointed officials in communities adjacent to U.S. Department of Energy (DOE) defense facilities. Our communities have long played a key role supporting the nation's national security efforts, hosting these national defense facilities with the understanding that the high-level waste (HLW) would ultimately be moved to Yucca Mountain or some other site in a safe and timely manner.

I want to begin by addressing the focus of this hearing – nuclear waste storage and disposal – and **provide some background on the needs and challenges of communities where defense waste currently sits.**

**Secondly, I will talk about an alternative path forward for waste disposal that ECA believes can reduce current cost estimates for addressing nuclear waste by upwards of \$40 BILLION. If**

**federal policymakers clarify how nuclear waste is classified under existing U.S. policy to allow disposal decisions to be based on radiological characteristics – actual risk – rather than the origin, the country can begin to address the growing liability and allow safe and more expedient nuclear waste management and disposal decisions.**

ECA communities focus on defense nuclear waste. DOE produced defense HLW through its reprocessing programs carried out at various sites, including the Hanford Site in Washington, Idaho National Laboratory and the Savannah River Site in South Carolina. In some cases, HLW remains at those sites, and in others, defense HLW has been shipped from one defense site to another for “temporary” storage pursuant to agreements with various states.

DOE has 332 underground tanks used to process and store liquid HLW waste. The large tanks sit at three locations: Hanford, Washington (~56,000,000 gallons); Idaho National Laboratory (~900,000 gallons); and at the Savannah River Site in South Carolina (~35,000,000 gallons). Some of these tanks are made of only a single shell of steel and would pose a serious threat to public health and the environment if the tank walls were to be compromised by corrosion.

The defense HLW is ultimately destined for disposal at Yucca Mountain. In cases where it has already been vitrified, it is being stored

on-site until a decision is made about this country's nuclear waste repository.

**ECA supports moving forward with the Yucca Mountain licensing process.** It's been 30 years since the Nuclear Waste Policy Act was passed and billions of dollars have already been spent. If the science demonstrates the viability of the project, we should work quickly to get Yucca Mountain open. If not, we believe there will be many significant lessons learned that could be applied if a new site needs to be identified. But the biggest impact will be that this waste will need a new deposition path.

Along with Yucca Mountain, **ECA also supports consolidated interim storage. But it must be part of an integrated and phased approach to ultimate disposal. Consolidated interim storage must exist alongside a permanent solution and not instead of it.** But I will remind you that as the path forward on both options continues to be debated and Congressional stalemates remain, our communities have already become *de facto* interim storage sites. And without a solution in sight, we think we should be compensated consistent with incentives that might be negotiated for the interim consolidated storage facilities proposed by some in Congress.

DOE and nuclear power producers incur large costs – paid for by taxpayers in *your* communities – every time the federal government

“kicks the can down the road.” The Government Accountability Office reported earlier this year that DOE’s environmental liability has almost doubled from a low of \$176 billion in 1997 to an estimate of \$372 billion in fiscal year 2016. DOE has already paid \$6.1 billion in damages – that breaks down to close to \$800 million annually in judgment fund payments or about \$2.5 million per day according to the National Association of Regulatory Utility Commissioners. The cost of inaction is high and we call on Congress and the Administration to act.

This brings me to my second issue, **so what can we do?** In the absence of DOE, the Nuclear Regulatory Commission or any other federal agency moving forward, ECA’s local government members are trying to develop alternatives to help get waste out of our communities. **One such alternative is clarifying the way nuclear waste is classified in the U.S.**

Our radioactive waste classification system currently relies primarily on “point of origin” rather than “composition” or the specific hazards posed by its disposal. This approach does not make sense and it is inconsistent: low-level waste is defined by exclusion whereas HLW is defined by its source. The waste classification system can also be vague, as is the case with the existing definition for HLW which states that waste must “contain fission products in sufficient concentrations.” However, the term “sufficient” is not quantified and the *current* state of

defense-HLW is not adequately addressed. Some of that waste could technically qualify as transuranic waste if based only on its radioactive material content. More simply explained, I can hold two wastes from two different sites in each hand, a scientist will tell me it is the same material but since its origin is different – current U.S. policy says it must be treated differently and one more expensively.

Only the U.S. classifies nuclear waste this way. The International Atomic Energy Agency (IAEA) recommends the more risk-based system wherein waste is classified by the “intrinsic qualities of the material.”

ECA’s report, “*Waste Disposition: A New Approach to DOE’s Waste Management Must Be Pursued,*” examines clarifying nuclear waste definitions and outlines five nearer-term actions we believe DOE can take to help cut years of operations, reduce the size and duration of storage facilities needed before a HLW repository is available, accelerate waste tank retrievals and closures, and, as I mentioned earlier, realize savings of more than \$40 billion.

Our first two recommendations reflect our preferred two-pronged approach and should happen in concert:

- 1. Congress should provide statutory clarification under the existing definition of high-level waste in the Nuclear Waste Policy Act to allow some wastes derived from**

**reprocessing of spent nuclear fuel to be managed as “other than high-level waste.”**

- 2. DOE should revise Order 435.1 to clarify that waste will be managed and dispositioned according to characteristics rather than origin.** We believe – as does DOE – that the Department already has the authority to do this under the Atomic Energy Act, but a legislative clarification will help codify the change and reduce the chances it will shift over time along with politics and new administrations.
  
- 3. DOE must begin working with the State of New Mexico on a permit modification for Waste Isolation Pilot Plant (WIPP) to remove the prohibition for receipt of tank wastes so that some of the waste currently classified as HLW can more appropriately be treated as transuranic waste and sent to WIPP provided it meets the waste acceptance criteria.** To put it in practical terms, this could allow 2,300 canisters of waste at the Savannah River Site in my home state, waste that is vitrified and ready for disposal, to safely go to WIPP rather than sit on-site waiting until a HLW repository is operational. The community of Carlsbad, New Mexico, that hosts WIPP is knowledgeable on these

issues, and supportive of clarifying waste definitions as one way to safely speed cleanup efforts.

4. To that end, **Congress and DOE should provide full funding for WIPP capital asset projects to resume the full range of disposal capabilities and ultimately increase capacity.** Once the necessary regulatory changes are made and resources are provided for outreach and education in the community and State to ensure they fully understand and support the mission, WIPP could take appropriately classified transuranic waste as well as the small amount of commercial waste. This could even result in more room for HLW and spent nuclear fuel in Yucca Mountain or any other HLW repository, which, make no mistake, remains essential to a comprehensive nuclear waste management strategy. As you all are well aware, due to legislatively-directed volume restrictions, Yucca Mountain is considered “full” before it even opens.
5. **DOE should begin to work on a number of pilot projects and waste management policy decisions to better understand alternative approaches.** ECA’s report outlines eight of these pilot projects.

ECA also urges Congress and DOE to consider private facilities such as Waste Control Specialists in Texas that could become an alternate disposal option if waste definitions are clarified.

Of course as any alternatives arise, **it is imperative that DOE enter into discussions as early as possible with host communities and states to ensure there is a full understanding of the risks and benefits of any proposal.** The completion of the DOE cleanup mission is vitally important to communities that host government sites and **it is critical that impacted host communities, states and regions have the resources and opportunities necessary to participate in planning and provide feedback in the policymaking process. For many communities, trust in DOE has eroded over time and transparency is paramount to our communities' ability to support DOE decisions.**

We understand that clarifying waste definitions is a large departure from current policy. But the current policy has not served us well, leaving waste in our communities and many others beyond the timeframe originally envisioned without a clear or timely path for disposal. The need for DOE to move forward with cleanup activities only increases, especially as more nuclear reactors are being decommissioned, and in order to build support for new low-carbon nuclear development and technologies like small-modular reactors.

The time appears ripe to make such a change. The Administration has made regulatory reform one of its key priorities. An April 24, 2017 DOE action memorandum on the regulatory review effort within the Department specifically targets regulations for “repeal, replacement or modification” if they “impose costs that exceed benefits.” Clarifying how waste is classified fits squarely within this initiative; there is support within DOE and among its contractors and DOE has already completed technical and programmatic analyses to enable these decisions now.

In closing, there *are* safe options. The Federal government must seriously consider them and more urgently address its responsibilities to safely dispose of both the government’s defense waste and the commercial HLW and spent nuclear fuel.

ECA greatly appreciates the opportunity to appear before you today. We call on you to help our communities and the country move forward, using science-based not political-science-based decisions to properly and safely move waste out of our communities and stop spending millions of taxpayer dollars only to pay fines. It just makes sense.