2023 DC DAYS Alliance for Nuclear Accountability

Break the Cycle

for a Safer Future

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Table of Contents

Report Overview Page 1

Nuclear Weapons Page 2 Recommendations Summary

Cleanup & Waste Management Page 3 Recommendations Summary

Stop New Warheads

Stop New Bomb Plants

Support Rule of Law & Nuclear Disarmament

No Cleanup on the Cheap

Don't Fund Consolidated Interim Storage

Develop New, Safe, Sound, Publicly Accepted Standards for New Deep Geological Repositories

Page 4

Page 5

Page 6

Page 7

Page 8

Page 9

2023 DC Days Report | Table of Contents

DC DAYS 2023 Break the Cycle for a Safer Future

It is time to break the cycle for a cleaner, safer future for all.

Now more than ever, the United States needs:

- a nuclear weapons policy that is neither provocative nor aggressive and,
- a nuclear waste policy that prioritizes health and safety for the lifetime of risk, from workers on the front lines, to future generations who will inherit the nuclear legacy we leave behind.



Alliance for Nuclear Accountability groups focus on:

- Stopping new nuclear weapons design, engineering, production, and testing activities.
- Addressing challenges from cleanup and waste management, processing, storage, and disposal.
- Stopping the creation of new nuclear waste.

ANA's collaboration of grassroots groups has worked for 36 years at local, regional, state, and national levels to address health and safety issues at Department of Energy and National Nuclear Security Administration sites for workers, the public, and the environment.

2023 Nuclear Weapons Recommendations

Stop New Warheads

- Biden's posture review and FY24 budget do not include the nuclear Sea-Launched Cruise Missile or its warhead (W80-4 ALT). Congress should not authorize or appropriate any funding for this system.
- The new warhead (W87-1) for the Sentinel ICBM should be terminated or re-scoped to allow full use of available W87-0 pits; the W93 should be terminated.
- The 1.2 megaton B83 bomb should be formally retired in FY24.

Stop New Bomb Plants

- Eliminate requirement for 80 pits per year. Stop plutonium pit infrastructure and production at the Savannah River Site. Do not expand pit production at the Los Alamos Lab.
- Cut "Plutonium Modernization" funding.
- Support a nationwide programmatic environmental impact statement on expanded plutonium pit production.

Support Rule of Law and Nuclear Disarmament

- The U.S. should honor the <u>1970 Non-Proliferation Treaty's</u> Article VI mandate to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament..."
- Congress should pass H.Res.77. The U.S. should support the Treaty on the Prohibition of Nuclear Weapons.
- The U.S. should withdraw nuclear bombs from Europe.

Nuclear Weapons Background

U.S. nuclear weapons policy is at an inflection point. Rethinking safety and security is essential. Escalating the funding for multiple novel warheads carries financial and technical risks while it intensifies nuclear dangers and adds fuel to the fire of a spiraling global arms race. Russia's illegal invasion of Ukraine turns the old adage that nuclear weapons prevent war on its head; instead they undergird Putin's aggression. The U.S. and Russia currently hold approximately 90% of the world's nuclear weapons. Bilateral, as well as multilateral diplomacy, must be soberly considered and creatively centered in our actions. As Reagan and Gorbachev first observed in 1985, a nuclear war cannot be won and must never be fought.

The entry into force in 2021 of the Treaty on the Prohibition of Nuclear Weapons challenges the nuclear weapons states and their allies to re-examine the role of nuclear weapons in policy and practice. Catastrophic climate change effects, research needed to prevent pandemics, and the dramatically increasing costs for nuclear weapons "modernization" all beg for a reassessment of our security priorities and call us to realign spending to meet peoples' safety needs on the ground.

2023 Cleanup & Waste Management Recommendations

No Cleanup on the Cheap - Spend Radically More on Cleanup Now

- Fight environmental injustice protect and empower the most vulnerable now and in the future.
- Cleanup don't buildup: stop funding new nuclear weapons.
- Stop the shortcuts and take the time to do it right. Double EM spending.
- Fund meaningful public involvement transparency is critical.

Don't Fund Consolidated Interim Storage (CIS) for Commercial Irradiated Nuclear Fuel

- Cut funding for federal interim storage.
- Keep the waste as close to the generating site as possible until there is a scientific repository and require Hardened Onsite Storage (HOSS).
- o Consent based siting for nuclear waste needs broad-based, full, free, prior, and informed consent. Bribery is not consent.
- Stop funding new nuclear reactors they create more waste.

Develop New, Safe, Sound, Publicly Accepted Standards for New Deep Geological Repositories

- Provide funding for the EPA to enact disposal standards for new waste repositories.
- Begin planning for WIPP's closure and a new waste disposition plan.
- Don't fund the Yucca Mountain repository

Cleanup & Waste Management Background

During the Cold War, nuclear weapons research, production and testing left a legacy of radioactive and chemical waste, environmental contamination, and hazardous facilities and materials at more than 100 sites in 30 states and one U.S. territory. After spending more than \$200 billion on cleanup over the past 35 years, the federal government says that 16 sites in 12 states will require decades more cleanup that will cost more than \$800 billion more. This contamination presents an ever-increasing risk to the environment, surrounding communities, and tribes. This nuclear legacy threatens rivers, aquifers, and wildlife.

There are no fast, cheap shortcuts. The communities that have borne the brunt of this legacy of contamination now also bear the greatest risk. The short-sighted focus on faster, cheaper decisions will only increase the burden future generations must bear. We all deserve a safer, cleaner future.

Irradiated nuclear fuel and defense high-level waste are among the most radioactive substances on Earth. Safe handling and eventual disposal of this deadly waste must include broad-based, full, free, and informed consent. Millions of tons of solid radioactive waste and billions of gallons of liquid waste are stored at nuclear reactor and weapons production sites across the United States. Though there are no complete plans for where this waste will be disposed, nuclear power plants and weapons production sites continue to generate more waste. This needs to stop. Break the cycle, and take us all to a safer future.

2023 Nuclear Weapons STOP NEW WARHEADS

• Biden's posture review and FY24 budget do not include the nuclear Sea-Launched Cruise Missile or its warhead (W80-4 ALT). Congress should not authorize or appropriate any funding for this system.

A new nuclear Sea-Launched Cruise Missile (SLCM) and warhead (W80-4 ALT) were determined to have "zero value" according to the Defense Dept. briefing in October that unveiled the nuclear posture review. While some lawmakers suggest it might have a deterrent value in Russia's war in Ukraine, it wouldn't be completed until 2035 or later. In 1990 George HW Bush removed the nuclear SLCM from ships. This throwback to the old Cold War should not be revived.

• The new warhead (W87-1) for the Sentinel ICBM should be terminated or rescoped to allow full use of available W87-0 pits; the W93 should be terminated.

The W87-1 warhead is slated to top a new Sentinel ICBM. The W87-1 would be the first time since the end of nuclear explosive testing in Nevada that the U.S. produces a warhead with wholly new components. Among the 126 risky, novel technologies NNSA has been considering for the W87-1 is a new plutonium core (pit). Superior options range from forgoing ICBMs, to canceling the unproven W87-1, to re-scoping (slimming down) the W87-1 design so that it can fully use existing W87-0 pits. The W93 is unnecessary because the Navy has two strategic warhead designs and both have been upgraded recently. The United Kingdom's warhead program (based on U.S. design) is its major driver. The W93 should be terminated.

• The 1.2 megaton B83 bomb should be formally retired in FY24.

The FY24 budget places the 1.2-megaton B83 bomb on a path to retirement. That process should be formalized and accelerated.

2023 Nuclear Weapons STOP NEW BOMB PLANTS

 Eliminate requirement for 80 pits per year. Stop plutonium pit infrastructure and production at the Savannah River Site. Do not expand pit production at the Los Alamos National Laboratory.

Expanded pit production is not necessary, as independent experts have concluded that pits last at least a century (their average age is now around 40). Moreover, at least 15,000 existing pits are already stored at the Pantex Plant in Texas and many could be reused. No new pit production is scheduled to maintain the safety and reliability of the existing nuclear weapons stockpile - instead heavily modified pits will be for speculative new designs (the W87-1 and W93 warheads). They can't be fully tested because of the international testing moratorium, hence eroding confidence in stockpile reliability. Or worse yet, it could possibly prompt the U.S. to resume testing, which would have serious international consequences. Existing limited pit production at the Los Alamos Lab is sufficient to act as a hedge against unforeseen problems, when planned redundant production at the Savannah River Site, which has zero experience with pit fabrication, has more than doubled in price to \$11 billion, and is already delayed until 2036 or later.

• Cut "Plutonium Modernization" funding.

"Plutonium Modernization" (i.e. pit production) costs are skyrocketing with \$15 billion to be spent over the next five years (\$2.77 billion in FY2024 alone). NNSA's last total cost estimate for pit production over 30 years was in 2018 for \$42 billion. Given known and future cost overruns, NNSA's pit production over 30 years will cost more than \$65 billion. So far, pit production costs are not included in NNSA's cost estimates for new-design warheads, which is illogical given that the plutonium pit is the all-important primary or "trigger" for modern thermonuclear weapons. Congress should demand that NNSA follow Government Accountability Office recommendations for credible total cost estimates and an "Integrated Master Schedule" for NNSA's most expensive program ever. Congress should also demand that NNSA include pit production costs in its overall cost estimates for any new-design warheads. Congress should demand that NNSA complete updated pit lifetime studies, which are overdue and not likely to support the need for expanded pit production. Until these basic good governance needs are satisfied, funding for Plutonium Modernization should be drastically cut or fenced.

Support a nationwide programmatic environmental impact statement on expanded plutonium pit production.

The government should honor its legal obligations under the National Environmental Policy Act to complete a new programmatic environmental impact statement (PEIS) on expanded plutonium pit production (the last one was in 2008 and did not consider two-site production). The PEIS would also review waste disposal from pit production in the Waste Isolation Pilot Plant. In addition, contrary to NNSA's plans, new site-wide environmental impact statements for the Los Alamos and Livermore Labs must include thorough and complete analyses of expanded plutonium pit production and related programs.

2023 Nuclear Weapons SUPPORT RULE OF LAW & NUCLEAR DISARMAMENT

 The U.S. should honor the <u>1970 Non-Proliferation Treaty's</u> Article VI mandate to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament..."

The U.S. needs to pursue progress towards nuclear disarmament negotiations with other nuclear weapons states. With New START currently suspended, the political climate and viewpoint towards peaceful resolution has shifted. However, the U.S. needs to re-shift its perspective and focus on diplomacy. Focusing on the soft power of nuclear disarmament resolutions would honor the NPT's Article VI mandate to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament..."

• Congress should pass H.Res.77. The U.S. should support the Treaty on the Prohibition of Nuclear Weapons.

In response to the failure of weapons states to honor the NonProliferation Treaty's 50-year-old obligation to pursue nuclear disarmament negotiations, 122 countries ("states parties") voted to adopt the UN Treaty on the Prohibition of Nuclear Weapons in 2017. The Treaty on the Prohibition of Nuclear Weapons entered into force and became part of international law in January 2021. The treaty has significant importance as, under international law, all facets of nuclear weapons are now illegal. As of 2022, 92 countries have signed and 68 countries have ratified the treaty; however, no nuclear weapons states have done so. The U.S. should support this treaty. One concrete way of doing this is by supporting House Resolution 77, which embraces the goals and provisions on the Treaty on the Prohibition of Nuclear Weapons and makes nuclear disarmament the centerpiece of the national security policy of the U.S. The treaty is the only current viable solution to nuclear destruction, underscoring its importance for this country and the world. The U.S. should step up and be a leader for other nuclear weapons states to follow.

• The U.S. should withdraw nuclear bombs from Europe.

Further, in keeping with the NPT's Article 1 prohibition on sharing nuclear weapons technologies, the U.S. should withdraw its forward deployed nuclear weapons from Europe.



2023 Cleanup & Waste Management NO CLEANUP ON THE CHEAP Spend Radically More on Cleanup Now

- Fight environmental injustice: protect & empower the most vulnerable now & in the future.
- Cleanup don't buildup: stop funding new nuclear weapons.
- Stop the shortcuts and take the time to do it right. Double EM spending.
- Fund meaningful public involvement transparency is critical.

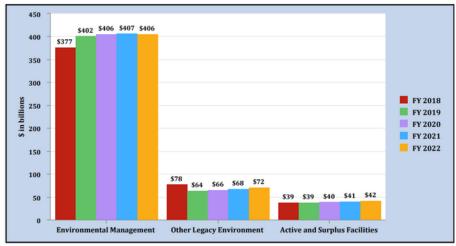
We are calling on Congress to spend radically more on cleanup now. DOE chronically under-requests funding for cleanup, in contrast to weapons production spending. It is time to stop paying to babysit waste sites and instead clean them up and get them off the books and backs of future generations. **Lighten the load for future generations now, with dramatically increased, well-managed spending on cleanup.**

Despite estimates (for FY 2024) that cleanup of Cold War nuclear wastes will cost at least \$847 billion, DOE requested only \$8.3 billion for cleanup in FY 2024, which is effectively no increase in current funding due to inflation. The EM budget needs dramatic increases in annual cleanup funding. For example, a bump up for Hanford to at least \$4 billion in FY24 with predictable dramatic annual increases to keep pace with legally binding cleanup agreements and to stop incentivizing shortcuts.

Annual funding of \$7-8 billion cannot keep pace with rapidly escalating costs. If we don't start spending radically more now on cleaup, the total cleanup cost will continue to increase far into the future, shifting onto the shoulders of our children, grandchildren, and great-grandchildren. This doesn't have to be the case.

Chart 4: Composition of Environmental Cleanup and Disposal Liability

Chart 4 from FY22 DOE Agency Financial Report provides a detailed trend analysis of the changes in the Department's environmental liabilities balances over the past five years. Most of DOE's environmental liabilities are managed by the Environmental Management (EM) program which addresses the legacy of contamination from the nuclear weapons complex and includes managing thousands of contaminated facilities formerly used in the nuclear weapons program, overseeing the safe management of large quantities of radioactive waste and nuclear materials, and cleanup of large volumes of contaminated soil and water. The active facilities portion of the environmental liability includes anticipated remediation costs for active and surplus



facilities managed by DOE's ongoing program operations which will ultimately require stabilization, deactivation, and decommissioning. Other legacy liabilities are divided between environmental liabilities for active sites, including estimated cleanup; and the Office of Legacy Management (LM) for post-closure responsibilities, including surveillance and monitoring activities; soil and groundwater remediation; and disposition of excess material from sites after the EM program activities have been completed. The other legacy liabilities also include the Department's share of the estimated future costs of dispositioning its inventory of high-level waste and spent nuclear fuel (SNF).

2023 Cleanup & Waste Management

Don't Fund Consolidated Interim Storage (CIS) for Commercial Irradiated Nuclear Fuel

- Cut funding for federal interim storage
- Keep the waste as close to the generating site as possible until there is a scientific repository and require Hardened Onsite Storage (HOSS).
- · Consent based siting for nuclear waste needs broad-based, full, free, prior, and informed consent - bribery is not consent.
- Stop funding new nuclear reactors they create more waste.

Consent-based siting criteria must be required in law and include free, full, prior, informed consent by affected tribal, state, and local governments. Low-income and/or BIPOC (Black, Indigenous, People of Color) communities, especially, are already disproportionately burdened by pollution and should not be targeted. Targeting these communities and calling it environmental justice is unacceptable.

As noted by the President's Blue Ribbon Commission, the lack of informed consent was an obstacle to licensing the proposed Yucca Mountain repository. Nevadans said "no," but that didn't stop the project. The lack of consent stemmed in large part from the lack of objective science-based siting criteria: standards for the Yucca Mountain site were set after the site was chosen, and were tailored to the site's characteristics rather than protection of public health and the environment.

By requiring hardened on-site storage for commercial irradiated nuclear fuel and commercial high-level waste, Congress can improve safety and abandon plans for Consolidated Interim Storage (CIS). It is safer to leave fuel where it is for now while legislating to direct future attempts to site a permanent disposal facility using broad-based, full, free, prior, and informed consent.

Another important reason for HOSS is to minimize transportation risks. CISFs automatically double transport risks for no good reason. Highly radioactive wastes should only be transported once, from nuclear power plant sites to a safe, sound, permanent geological repository. This will minimize high-risk transportation of highly radioactive wastes through most states in the Lower 48.

Some sites are not safe and secure enough to accomplish HOSS. In that case, hardened storage as close to the point of origin as possible is the fall back position.

Similarly, stop bailing out old reactors to extend their operations. This also means more unnecessary waste generation, as well as increased safety risks due to age-related degredation.

Cleanup of our nation's nuclear legacy is a multi-generational endeavor; with long-term monitoring required forever to keep chemical and radioactive contamination isolated from our water, wildlife, and shared resources. The passing of the Justice40 initiative and renewed interest from the Biden Administration in Environmental Justice are an opportunity to turn lip service into action. However, ANA strongly opposes targeting already disproportionately burdened low-income and/or BIPOC communities with consolidated interim storage facilities, and calling it Environmental Justice.

Congress can make this a reality by increasing funding for environmental protection and stopping attempts to shortcut cleanup, to ensure the protection of the most vulnerable in our communities. For more information on all of these issues click here.

2023 Cleanup & Waste Management

Develop New, Safe, Sound, Publicly Accepted Standards for New Deep Geological Repositories

- Provide funding for the EPA to enact disposal standards for new waste repositories.
- Begin planning for WIPP's closure and a new waste disposition plan.
- Don't fund the Yucca Mountain repository.

We are calling on Congress to fund the Environmental Protection Agency (EPA) to develop new, safe, publicly accepted standards for deep geological repositories. Consent based siting for nuclear waste needs broad-based, full, free, prior and informed consent. Bribery is not consent. Low-income and/or BIPOC (Black, Indigenous, People of Color) communities, especially, are already disproportionately burdened by pollution, and should not be targeted.

The Waste Isolation Pilot Plant (WIPP) was supposed to be the first, but not only geologic repository for the nation's nuclear waste. The National Academy of Sciences 2020 Report determined that DOE's proposed amounts of transuranic waste to bring to WIPP would exceed the legal limit. But DOE continues planning to expand WIPP and keep it open for at least six decades more, contrary to legal requirements, agreements, and permits with the State of New Mexico. DOE should comply with the law and agreements with New Mexico by beginning to plan for WIPP's closure and a new waste disposition plan.

ANA opposes expanding WIPP and supports the State of New Mexico regulating the site. DOE and Congress must take action to comply with WIPP's agreements and promises, including beginning the EPA process to establish technical standards for the next repository and then begin the siting process.

The 2020 National Academies of Science Report stated that WIPP does not have capacity for all transuranic waste. Congress should not fund producing more such waste until there is another repository for the waste. Therefore, Congress should provide funding for the EPA to issue disposal standards for new waste repositories.



Alliance for Nuclear Accountability