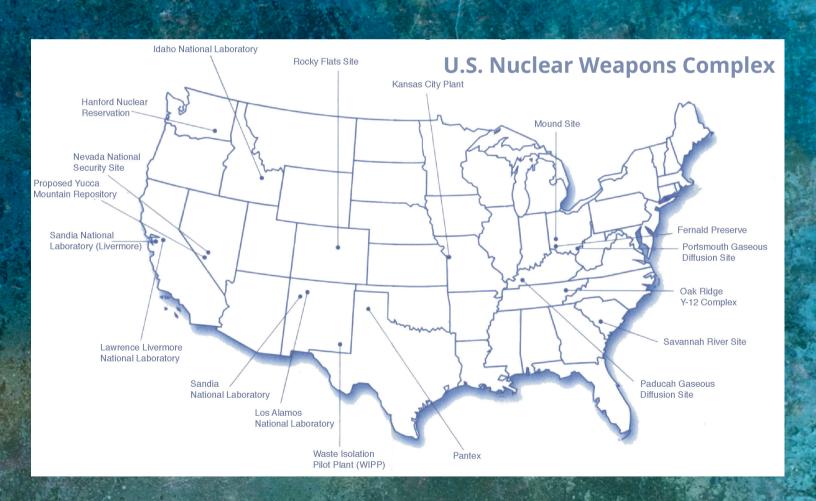


A Safer, Cleaner, Nuclear Free Future for All

Lightening the Intergenerational Burden of Nuclear Weapons & Waste



DC Days 2022

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DC DAYS 2022

Lightening the Intergenerational Burden of Nuclear Weapons & Waste

It is time to prioritize a safer, cleaner, nuclear free 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 35 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.

2022 Nuclear Weapons Recommendations

Stop New Warheads

- Cut funding for the W80-4 Long Range Standoff (air launched cruise missile) warhead, the W87-1 intercontinental ballistic missile warhead, and the B61-12 nuclear bomb.
- o Terminate the sub-launched W93 and Sea-Launched Cruise Missile warheads.
- Retire and dismantle the 1.2 megaton B83 bomb.

Stop New Bomb Plants

- Eliminate requirement for 80 pits per year. Stop plutonium pit bomb core infrastructure and production at the Savannah River Site. Restrain production from expanding at the Los Alamos National Laboratory.
- o Cut "Plutonium Modernization" funding.
- Support a nation-wide programmatic environmental impact statement on expanded plutonium pit production and new site-wide environmental impact statements for the Los Alamos and Livermore Labs.

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..."
- o 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

Achieving safety and security in the nuclear arena will require a re-thinking of long-held assumptions and practices. Russia's invasion of Ukraine has turned the old argument that nuclear weapons prevent war on its head when instead they enabled Putin's aggression. The old rationale of deterrence based on mutually assured destruction is counterproductive; that is, it undermines rather than supports our security goals. So-called "deterrence" masks the fact that the U.S. and Russia have always sought nuclear warfighting capabilities even though there can be no winners in a nuclear war.

At the same time, the entry into force of the Treaty on the Prohibition of Nuclear Weapons challenges nuclear armed states and their allies to re-examine the role of nuclear weapons in policy and practice. The COVID-19 pandemic, catastrophic climate change effects, and dramatically increasing costs for nuclear weapons "modernization" all beg for a reassessment of the nation's security priorities and challenge the government to realign spending to meet real threats being experienced on the ground.

2022 Cleanup & Waste Management Recommendations

No Cleanup on the Cheap

- Invest in Intergenerational Equity
- Address Environmental Injustice Protect and Empower the Most Vulnerable Now and in the Future
- Cleanup Don't Buildup: Stop Funding New Nuclear Reactors
- Rescind DOE's 2019 High-Level Waste Re-Interpretation

Increase Transparency & Accountability

- Support Increased Funding for DOE's Office of Inspector General & the DNFSB
- Fund Meaningful Engagement in Decision Making Transparency is Critical

Require Consent for Waste Sites

- Consent Based Siting for Nuclear Waste Needs Broad-Based, Full, Free, Prior and Informed Consent
- Improve safety by requiring Hardened Onsite Storage (HOSS)
- Ensure safety and security- expedite transfer of fuel from pools to hardened on-site storage.
- Don't fund Consolidated Interim Storage (CIS) for commercial irradiated nuclear fuel
- Don't fund the Yucca Mountain repository

Stop Forever WIPP

- Stop Forever WIPP, which was supposed to be the first, but not only, geologic repository
- 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

Cleanup & Waste Management Background

The legacy of 75 years of nuclear weapons production is spread across 16 sites in 12 states. The contamination at many of these sites 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 atomic reactor and weapons production sites across the United States. Though there are no complete plans for disposing of this waste, nuclear power plants and weapons production sites continue to generate more. This needs to stop.

2022 Nuclear Weapons STOP NEW WARHEADS

• Cut funding for the W80-4 Long Range Standoff (air-launched cruise missile) warhead, the W87-1 intercontinental ballistic missile warhead, and the B61-12 nuclear bomb.

The W80-4 cruise missile warhead is a destabilizing first-strike weapon; therefore, it should be eliminated. The W87-1 intercontinental ballistic missile warhead will replace the W78. That replacement marks the first time the National Nuclear Security Administration (NNSA) produces a design with wholly new components. 126 new technologies are being considered. The W87-1 design is costly, unproven, and will require a new plutonium core. It should be canceled.

 Terminate the sub-launched W93 and Sea-Launched Cruise Missile warheads.

The W93 is unnecessary because the Navy's W76 warhead just completed a major Life Extension Program of its own. The United Kingdom, not the U.S., is the main driver for the W93. The replacement for the Sea-Launched Cruise Missile warhead, withdrawn from ships in the early 1990s, is a throwback to the Cold War and should be eliminated.

Retire and dismantle the 1.2 megaton B83 bomb.

"Sustainment" of the 1.2 megaton B83 bomb should stop and the warhead dismantled, as its successor the B61-12 begins production; whose costs should be cut as well.

2022 Nuclear Weapons STOP NEW BOMB PLANTS

• Eliminate requirement for 80 pits per year. Stop plutonium pit bomb core infrastructure and production at the Savannah River Site. Restrain production from expanding 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. 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 tested because of the international testing moratorium; hence eroding confidence in stockpile reliability, or worse yet prompting the U.S. back into testing. Existing limited pit production at the Los Alamos Laboratory is sufficient to act as a hedge against unforeseen problems, while redundant production at the Savannah River Site (SRS) will help fuel the new accelerating nuclear arms race.

• Cut "Plutonium Modernization" funding.

Plutonium Modernization costs are skyrocketing with more than \$13 billion to be spent over the next five years. NNSA's last publicly available cost estimate for pit production over 30 years was in 2018 for \$42 billion. Since then, the estimated costs for the Savannah River Plutonium Processing Facility have more than doubled to \$11 billion. Given typical cost overruns, NNSA's pit production over 30 years will likely cost around \$60 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 an independent new cost estimate for pit production over 30 years. Related, Congress should demand that NNSA include pit production costs in its overall cost estimates for any new-design warheads. Congress should also demand that NNSA complete updated pit lifetime studies, which are already overdue and not likely to support the need for new pit production. Until these good governance needs are satisfied, funding for Plutonium Modernization should be drastically cut.

• Support a nation-wide programmatic environmental impact statement on expanded plutonium pit production and new site-wide environmental impact statements for the Los Alamos and Livermore Labs.

Finally, the government should honor its legal obligations under the National Environmental Policy Act to complete a new programmatic environmental impact statement on expanded plutonium pit production (the last one was in 2008) and new site-wide environmental impact statements for the Los Alamos and Livermore Labs.

2022 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. should support the Treaty on the Prohibition of Nuclear Weapons.
- The U.S. should withdraw nuclear bombs from Europe.

The U.S. and other nuclear weapons states need to demonstrate progress toward nuclear disarmament negotiations and explain the lack thereof at the NonProliferation Treaty's August 2022 Review Conference. 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 U.S. should reverse itself, support the ban treaty, and send an observer to the First Meeting of States Parties in June 2022. Further, in keeping with the NPT's Article I prohibition on sharing nuclear weapons or nuclear weapons technologies, the U.S. should withdraw its forward-deployed nuclear weapons from Europe.



2022 Cleanup & Waste Management NO CLEANUP ON THE CHEAP

Invest in Intergenerational Equity

Lighten the load for future generations with increased, well-managed spending on cleanup.

Congress must invest in a more radical vision of cleanup that protects all by spending more now to spend less later. DOE chronically under-requests funding for cleanup in favor of weapons production spending, which results in paying to babysit waste sites instead of cleaning them up and getting them off the books and backs of future generations.

Despite estimates that cleanup of Cold War nuclear wastes will cost at least \$516 billion, DOE is requesting only \$8 billion for cleanup in FY 2023, which barely keeps pace with the annual estimated increase.

The liability estimate increased by \$4 billion during FY 2021. Annual funding of \$7-8 billion cannot keep up with rapidly escalating costs, so the ultimate cost is likely to be more than any current "high" estimate, and at this pace, will eventually shift onto the shoulders of our children, grandchildren, and great-grandchildren.

Address Environmental Injustice

Protect and Empower the Most Vulnerable Now and in the Future

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.

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.

Cleanup Don't Buildup: Stop Funding New Nuclear Reactors

New reactors produce more nuclear waste. More funding needs to go to cleanup. Stop funding new reactors.

Rescind DOE's 2019 High-Level Waste Re-Interpretation

The Department of Energy's 2019 re-interpretation of the term High-Level Radioactive Waste eliminates important safeguards established by Congress through the Nuclear Waste Policy Act in a way that threatens human health and the environment. Congress should rescind the High-Level Radioactive Waste interpretive rule.

2022 Cleanup & Waste Management INCREASE TRANSPARENCY & ACCOUNTABILITY

Support Increased Funding for DOE's Office of Inspector General & the DNFSB

Key to the successful use of increased cleanup funding is ensuring effective oversight of contractor performance. About 90 percent of DOE EM funding goes to private contractors that operate the sites and carry out remediation activities. Contractors have received bonuses despite cost overruns, poor performance, and worker contamination.

The Office of the Inspector General (OIG) is requesting \$106 million for FY23. This is an 84% increase from FY22. This increase is needed. Congress can increase accountability and transparency by increasing funding for the DOE Office of Inspector General & the Defense Nuclear Facilities Safety Board (DNFSB).

Require Meaningful Engagement in Decision Making **Transparency is Critical**

DOE is shutting the public out of decisions, hiding documents, and refusing to make decision-making accessible to a broad and diverse public. It must stop. We are calling on Congress to require DOE to increase transparency and accountability for meaningful engagement with a diverse public that shapes cleanup decisions.

Cleanup will only be successful if it involves broader meaningful public engagement in cleanup decisions with real effort to engage a diverse public and honor treaty rights. Cleanup must protect the most vulnerable by isolating chemical and radioactive hazards to protect future generations.

2022 Cleanup & Waste Management Require Consent for Waste Sites

Consent Based Siting for Nuclear Waste Needs Broad-Based, Full, Free, Prior, and Informed Consent

Consent-based siting criteria must be required in law and include free, full, prior, informed consent by affected tribal, state, and local governments.

As noted by the President's Blue Ribbon Commission, the lack of informed consent was an obstacle to licensing of the proposed Yucca Mountain repository. And 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.

The concept of informed consent requires the power to say "no" to a proposed facility or demand greater protection than afforded by federal standards. New repository standards must be based on sound scientific and equitable principles, and must be established before the repository siting and licensing process begins.

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 broadbased, full, free, prior, and informed consent.

- Improve safety by requiring Hardened Onsite Storage (HOSS)
- Be proactive about the risks of on-site storage in pools and dry casks expedite transfer of fuel from pools to hardened on-site storage.
- Don't fund Consolidated Interim Storage (CIS) for commercial irradiated nuclear fuel.
- Don't fund the Yucca Mountain repository.

For more information on all of these issues click here.

2022 Cleanup & Waste Management STOP FOREVER WIPP

Stop Forever WIPP

The Waste Isolation Pilot Plant (WIPP) was supposed to be the first, but not only geologic repository. The National Academies of Sciences 2020 Report determined that DOE's proposed amounts of transuranic waste [that need storage at WIPP] would exceed the legal limit. But DOE continues to plan for expanding WIPP and keeping it open for at least six decades more, contrary to legal requirements, agreements, and permits with the State of New Mexico.

Stop plans to expand WIPP beyond its scope, put an end to broken promises. DOE and Congress must take action to comply with WIPP's agreements and promises, including beginning the Environmental Protection Agency process to establish technical standards for the next repository and then begin the siting process.

Fund EPA to Enact Disposal Standards for New Waste Repositories

WIPP does not have capacity for all transuranic waste. Therefore, Congress should provide funding for the Environmental Protection Agency (EPA) to enact disposal standards for new waste repositories.

Begin Planning for WIPP's Closure and a New Waste Disposition Plan

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.



