2024 DC DAYS

Alliance for Nuclear Accountability

Nuclear Abolition: An idea whose time has come

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DC DAYS 2024

Nuclear Abolition: An Idea Whose Time Has Come

It is time to embrace nuclear abolition to pave the path for a safer, cleaner future for all. Now more than ever, the United States needs:

- a nuclear weapons policy that is neither provocative nor aggressive,
- a nuclear waste policy that prioritizes health and safety for the lifetime of risk, from workers on the front lines to future generations who inherit the nuclear legacy we create
- a nuclear power phase-out to prevent never-ending radioactive waste generation.



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 37 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.

2024 Nuclear Weapons Recommendations

Stop New Warheads

- Biden's FY25 budget request does 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 warhead for the Sentinel ICBM should be terminated or re-scoped to allow full use of available W87-0s. The W87-1 funding should be reduced or eliminated.
- The W93 warhead should be terminated and the 1.2 megaton B83 bomb, currently slated for retirement at an unnamed time, should be fully retired in FY25.

Stop New Bomb Plants

- Funding for NNSA's "Plutonium Modernization" should be cut. Congress should mandate a new pit aging study and NNSA should complete a new Programmatic Environmental Impact Statement.
- Congress should demand a full accounting of cost overruns at the Uranium Processing Facility.
- Expansion of the Kansas City National Security Complex should be subject to public review under the National Environmental Policy Act.

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.

Increase Oversight and Accountability

- Congress should strictly require credible cost estimates and integrated master schedules at the beginning of all NNSA nuclear weapon modernization programs and major infrastructure projects.
- Congress should implement legislation similar to the Nunn-McCurdy Act, tailored specifically to the NNSA's acquisitions and operations.

Nuclear Weapons Background

Escalating the funding for multiple novel warheads carries financial and technical risks, while intensifying nuclear dangers and adding 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 hold 90% of the world's nuclear weapons. Bilateral and multilateral diplomacy must be soberly considered and creatively centered in our actions. As Reagan and Gorbachev 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. The spiraling costs for U.S. nuclear weapons "modernization" (nearly \$2 trillion and growing) call Congress to reassess spending priorities and realign funding.

2024 Cleanup & Waste Management Recommendations

No Cleanup on the Cheap - Protect People and the Environment

- Lifecycle cleanup costs are growing faster than the annual budget. Face these liabilities to better manage increasing contamination and future costs.
- Stop the shortcuts and do it right.
- Fight environmental injustice. Protect and empower Frontline Communities now and in the future. 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.
- Require Hardened On-Site Storage (HOSS). Keep the waste as close to the generating site as possible until there is a scientifically suitable repository.
- Consent based siting for nuclear waste facilities needs broad-based, full, free, prior, and informed consent. Bribery is not consent.

No New Waste - No New Reactors, No Relicensing, Oppose Subsidies

- Stop funding new nuclear reactors and closed reactor restarts. They create more waste.
- Oppose relicensing existing nuclear reactors.
- Oppose subsidies for bailouts at old reactors and for prolonging operations. These also create more waste.

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 over \$882 billion more. This contamination presents an ever-increasing risk to the environment, surrounding communities, and tribes. This nuclear legacy threatens surface waters, 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 of, nuclear power plants and weapons production sites continue to generate yet more waste. This needs to stop in order to ensure a safer future.

2024 Nuclear Weapons STOP NEW WARHEADS

 Biden's FY25 budget request does 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.

Reinstituting a SLCM-N, which was withdrawn from ships in 1991 by George H.W. Bush and subsequently retired, is wasteful. A new nuclear Sea-Launched Cruise Missile and warhead (W80-4 ALT) were determined to have "zero value" according to the Defense Department's briefing that unveiled the Biden 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. This Cold War-era policy should not be revived.

• The warhead for the Sentinel ICBM should be terminated or re-scoped to allow full use of available W87-0s. The W87-1 funding should be reduced or eliminated.

The FY25 budget request for the W87-1, the first new warhead design since the end of the Cold War requiring all new components, is \$1.1 billion. 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 (AKA "pit"). Superior options include forgoing ICBMs, canceling the unproven W87-1, or re-scoping (slimming down) the W87-1 design so that it can fully use existing W87-0 pits.

• The W93 warhead should be terminated and the 1.2 megaton B83 bomb, currently slated for retirement at an unnamed time, should be fully retired in FY25.

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. NNSA's FY24 budget placed the 1.2 megaton B83 bomb on a path to retirement at an unnamed time. That process should be accelerated and completed in FY25.

2024 Nuclear Weapons STOP NEW BOMB PLANTS

 Funding for NNSA's "Plutonium Modernization" should be cut. Congress should mandate a new pit aging study and NNSA should complete a new Programmatic Environmental Impact Statement.

The U.S. lost industrial-scale plutonium pit production after the 1989 FBI Rocky Flats Plant raid investigating environmental crimes. In 1997 NNSA relocated production to the Los Alamos National Laboratory (LANL) in northern New Mexico but limited it to 20 pits per year. NNSA is now expanding production to at least 30 pits per year at LANL and at least 50 pits per year at the Savannah River Site (SRS) in South Carolina. No future pit production is to maintain the safety and reliability of the existing, extensively tested nuclear weapons stockpile. Instead, future pit production is for speculative new-designs that can't be tested because of the international testing moratorium. Alternatively, new designs could prompt the U.S. to resume testing. Independent experts have concluded that pits last at least 85 years (they are now approximately 40 years of age). Up to 20,000 existing pits are already stored at the Pantex Plant near Amarillo, TX. Pit production is extremely expensive (approximately \$55 billion over the next 25 years). Nevertheless, NNSA has no credible cost estimates or schedules. The Savannah River Site Plutonium Processing Facility is slated to cost up to \$30 billion, making it the second most expensive building in human history. NNSA refuses to update its 2008 pit production programmatic environmental impact statement.

Congress should demand a full accounting of cost overruns at the Uranium Processing Facility.

NNSA is building the Uranium Processing Facility (UPF) at the Y-12 Plant near Oak Ridge, TN. The agency repeatedly promised to Congress that the UPF would never cost more than \$6.5 billion. NNSA then moved the goal posts by stripping all non-production missions from the UPF and continuing operations at two contaminated facilities previously slated for decontamination and decommissioning. The UPF is now estimated to cost up to \$9 billion, still subject to upward revision.

• Expansion of the Kansas City National Security Complex should be subject to public review under the National Environmental Policy Act.

Some 20 years ago the Kansas City Plant, which manufactured or procured 80% of all non-nuclear nuclear weapons components, was being considered for post-Cold War closure. To prevent that, the Kansas City, Missouri municipal government offered to subsidize a new plant by declaring a producing soybean field blighted in order to obtain urban renewal funding. The resulting Kansas City National Security Complex (KCNSC) is still owned by the City which leases it to the NNSA, thereby bypassing customary Congressional appropriations and scrutiny. NNSA is now seeking to expand the KCNSC by 50% for increased nuclear weapons production for the new arms race.

2024 Nuclear Weapons SUPPORT RULE OF LAW & NUCLEAR DISARMAMENT

• The U.S. should honor the 1970 Non-Proliferation Treaty'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..."

The U.S. needs to pursue progress towards nuclear disarmament negotiations with other nuclear weapons states. With New START, the last remaining nuclear arms control treaty between the U.S. and Russia (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 Non-Proliferation Treaty's 54-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 now, 93 countries have signed and 70 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.



2024 Nuclear Weapons INCREASE OVERSIGHT & ACCOUNTABILITY

 Congress should strictly require credible cost estimates and integrated master schedules at the beginning of all NNSA nuclear weapons modernization programs and major infrastructure projects.

The NNSA, and its contractors, have a long history of extreme scheduling delays and major cost overruns for its nuclear weapons programs (e.g., the W87-1, W80-4 and W93 warheads) and infrastructure projects, including the UPF at the Y-12 Weapons Complex, the terminated MOX Fuel Fabrication Facility at the Savannah River Site (SRS) and the new and upgraded plutonium pit production facilities at SRS and the Los Alamos National Laboratory. Dozens of programs in the past few decades have exceeded initial cost estimates and gone years over schedule, duping Congress into initial approval and making it hard to cancel or rein in programs once the actual costs and true timelines are revealed. As a result, the NNSA and its predecessors have appeared on the Government Accountability Office's (GAO) High Risk List report since 1991 for project and contractor mismanagement, overall program inefficiencies and lack of accountability, including in 2023. Additionally, Congress has asked the GAO for multiple studies into NNSA mismanagement, but these studies have done little to rein in the NNSA's waste of taxpayers' money or convince Congress to scale back or cancel weapons infrastructure programs. Recently, the Defense Department's Sentinel ICBM program has been widely reported to be 37% over its initial cost estimate, triggering a "Nunn-McCurdy Act" breach process that requires extensive reporting to Congress and the possibility of project termination or project restructuring. However, the missile's warhead, the W87-1 being developed by the NNSA, has also missed scheduling milestones, causing delays that are expected to result in cost overruns. But there is no similar legislation that would require review of the W87-1, as NNSA is not covered by the Nunn-McCurdy Act.

• Congress should implement legislation similar to the Nunn-McCurdy Act, tailored specifically to the NNSA's acquisitions and operations.

NNSA is not covered by the Nunn-McCurdy Act. Implementing this legislation would require the NNSA to report to Congress on major cost overruns and scheduling delays under the threat of program termination. Such legislation would hold the NNSA accountable for its poor contractor management, persistently underestimated initial cost estimating, and its lack of schedule management.

2024 Cleanup & Waste Management NO CLEANUP ON THE CHEAP Protect People and the Environment

- Lifecycle cleanup costs are growing faster than the annual budget. Face these liabilities to better manage increasing contamination and future costs.
- Stop the shortcuts and do it right.
- Fight environmental injustice. Protect and empower Frontline Communities now and in the future. Fund meaningful public involvement transparency is critical.

We are calling on Congress to spend radically more on cleanup of the Cold War mess 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 2025) that cleanup of Cold War nuclear wastes will cost at least \$882 billion, DOE requested only \$8.5 billion for cleanup in FY 2025, 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 FY25 with predictable dramatic annual increases to keep pace with legally binding cleanup agreements and to stop incentivizing shortcuts.

Annual funding of \$8-9 billion cannot keep pace with rapidly escalating costs. If we don't start spending radically more now on cleanup, 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, from DOE's FY 2023 Agency Financial Report, provides an analysis of the increasing DOE 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 management of large quantities of radioactive waste and nuclear materials, and cleanup of large volumes of contaminated soil and water. Other legacy liabilities include post-closure responsibilities for the Office of Legacy Management (LM) and cleanup after the EM program activities have been completed. The other legacy liabilities also include DOE's costs of dispositioning its inventory of high-level waste and spent nuclear fuel (SNF). These are yet more unfunded liabilities.

The estimated environmental liabilities include the versions of cleanup that DOE can justify while leaving much of the wastes behind. For instance, DOE's preferred alternative for an estimated \$12 million cleanup of Materials Disposal Area C, at Los Alamos National Laboratory, is cap-and-cover of the 11.8 acre site. This would leave the wastes above the regional aquifer forever. However, the New Mexico Environment Department is requiring complete excavation of Area C at an estimated cost of \$805 million. Later this year, members of the public will join the Environment Department in a Hearing to decide this matter. DOE will likely end up suing the Environment Department to try and get cap-and-cover instead of doing the right thing.

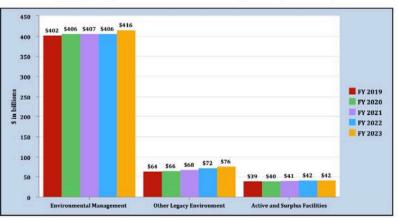


Chart 4: Composition of Environmental Cleanup and Disposal Liability

2024 Cleanup & Waste Management

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

- Cut funding for federal interim storage; and don't fund the Yucca dump.
- Keep the waste as close to the generating site as possible until there is a scientifically suitable 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.

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 on America's Nuclear Future, 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, as it should have. 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 scientifically unsuitable site's flawed 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, such as further inland from surface waters, and to higher ground as a precaution against flooding risks.

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 then calling it "Environmental Justice." This is Orwellian.

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 <u>click</u> <u>here.</u> (https://beyondnuclear.org/video-fact-sheets-about-ej-burden-of-nuke-waste-dumps-transport/)

2024 Cleanup & Waste Management No New Waste - No New Reactors, No Relicensing, Oppose Subsidies

- Stop funding new nuclear reactors and closed reactor restarts. They create more waste.
- Oppose relicensing existing nuclear reactors.
- Oppose subsidies for bailouts at old reactors and for prolonging operations. These also create more waste and increase safety risks due to age-related degradation.

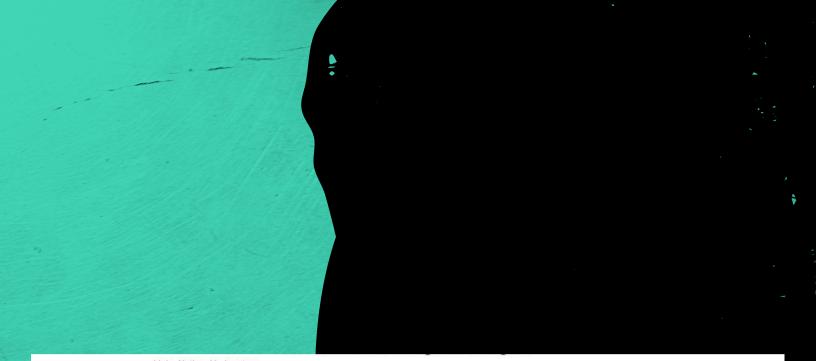
The lead "Small Modular Reactor" (SMR) development scheme — NuScale's in Idaho — was cancelled. Most other SMR designs have yet to be certified, despite large federal subsidies. SMRs are repeating the failure of the giant new build reactor "renaissance" during the George W. Bush administration: of threedozen proposed reactors, only two have slogged into operation. Vogtle 3 and 4 in Georgia arrived many years behind schedule; their price tag more than doubled since 2012, from \$15 billion to more than \$35 billion.

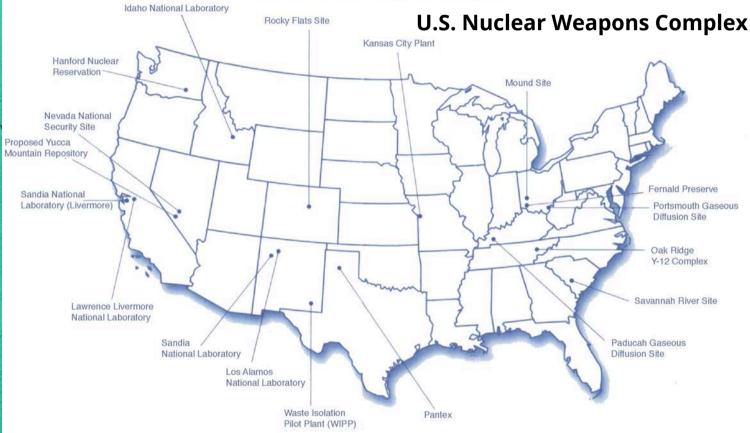
Due to loss of economy of scale, depending on the design, SMRs would generate two to 30 times the amount of high-level radioactive waste, per unit of electricity produced, as current reactors. This would worsen our radioactive waste dilemma.

A growing number of reactors are applying for "subsequent license renewal," for 80-years of operations, twice their initial 40-year licenses. If approved, not only would age-related degradation risks of reactor core meltdowns increase, but reactors would continue to generate yet more metric tons of irradiated fuel annually.

So too would unprecedented restart of closed reactors. Holtec proposes restarting Palisades in Michigan. It has requested \$8.3 billion in public bailouts to do so, while ignoring extreme safety risks at the more than half-century old reactor.

As reported by NIRS, nuclear power subsidies in the Inflation Reduction Act of 2022 (\$383 billion) are larger than the law's climate spending (\$369 billion). Generation of yet more radioactive waste, for which we have no safe, sound disposition, reveals that nuclear power is not a climate solution.







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ANA Members

- Beyond Nuclear
- Blue Ridge Environmental Defense League
- Colorado Coalition for the Prevention of Nuclear War
- Concerned Citizens for Nuclear Safety
- Fernald Residents for Environmental Safety and Health
- Georgia Women's Action for New Directions
- Hanford Challenge
- Heart of America Northwest
- Justpeace
- Miamisburg Environmental Safety & Health
- Nuclear Age Peace Foundation
- Nuclear Watch New Mexico
- Nuclear Watch South
- Oak Ridge Environmental Peace Alliance
- Parents Against Santa Susana Field Laboratory
- Peace Action
- Peace Farm
- Peaceworks Kansas City
- Physicians for Social Responsibility
 - PSR Los Angeles
 - PSR Kansas City
- Portsmouth/Piketon Residents for Environmental Safety and Security
- Rocky Mountain Peace & Justice Center
- Savannah River Site Watch
- Snake River Alliance
- Southwest Research & Information Center
- Tri-Valley Communities Against a Radioactive Environment
- Women's International League for Peace & Freedom