



OREPA News

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2nd anniversary of the Ban Treaty



Flags of the countries that have signed the Ban Treaty hung outside of Y-12

JANUARY 22 marks a significant date on the calendars of nuclear weapons activists. This is the date the Treaty on the Prohibition of Nuclear Weapons, also known as the Ban Treaty, entered into force in 2021. Under the treaty, nuclear weapons are illegal under international law—everything having to do with nuclear weapons is prohibited, from manufacturing to possessing to threatening to use them. On its second year of its adoption, 92 countries have signed and 68 have ratified the treaty. However, no nuclear weapons states have signed on to the treaty.

HISTORY OF THE TREATY

This is therefore a crucial time for civil society and grassroots organizations to be involved with raising public awareness of the treaty, which ties directly to its origin. The idea for the treaty originated with a small group of diplomats, activists, and non-governmental organizations who believed it might be possible to write a treaty that would give nations without nuclear weapons a

way of expressing their frustration with the slow pace of nuclear weapons elimination. Diplomats partnered with civil society organizations to make a treaty like this a reality. A big one of these organizations was the International Campaign to Abolish Nuclear Weapons (ICAN), of which OREPA is a member group. ICAN launched in 2007 and spent the next decade building public support for the elimination of nuclear weapons and creating a coalition of partner nations and other organizations to further this cause. In 2011, the International Red Cross adopted a resolution calling on nations to negotiate a legally binding international agreement to eliminate nuclear weapons. By 2017, the United Nations officially began negotiating a ban treaty and on July 7, 2017, the treaty was adopted by 122 UN member states.

OREPA'S WORK

During the past two anniversary celebrations, OREPA has honored the grassroots origin of

this treaty by building support and raising public awareness. This year, OREPA members and a good sized group of supporters withstood the cold and rainy conditions to stand outside of the Y-12 Weapons Plant in Oak Ridge, holding yellow banners declaring "Nuclear Weapons are Illegal" and flags of the countries that have ratified the treaty. Excerpts of treaty were then read aloud to give some context of the treaty. We were pleasantly surprised with the turnout, despite the unpleasant weather conditions, which gives us hope for the strength of the movement and how important the treaty is to nuclear weapon abolitionists.

Actions across the country called on the US to join the Ban Treaty. We gathered at Oak Ridge for an action at the bomb plant. There we read excerpts of the Treaty and placed flags on the fence in front of the Y-12 Nuclear Weapons Complex.

However, OREPA also put time and energy not only into our own event, but into events taking place across the country by supporting the Nuclear Ban Treaty Collaborative. OREPA directed other activists and grassroots groups to the Nuclear Ban Treaty Collaborative website, where they could find resources, such as the yellow banners,

signs, readings, templates for press releases, letters to Congress, etc., to organize and post pictures of their own actions.

We were encouraging groups to be creative with how they wanted to honor the treaty and spread awareness. OREPA believes it is important to think of the bigger picture and focus on nationwide efforts, not just our own organization. The more people who raise public awareness and put pressure on our local leaders to push for the Ban Treaty, the better off we all are. We believe the Ban Treaty is the most powerful tool the nuclear abolition movement has had in years, and we are committed to educating, organizing, and mobilizing this movement for nuclear disarmament. You can find photos and reports of actions from across the country on the Nuclear Ban Treaty Collaborative facebook page.



The Oak Ridge Environmental Peace Alliance is a grassroots nonprofit organization working to educate and organize people about nuclear weapons production in Oak Ridge, Tennessee. We advocate an end to weapons production and we work to create and nurture nonviolent community in East Tennessee.

OREPA's newsletter is printed four times a year by Ullrich Printing in Knoxville, Tennessee and is on-line at orepa.org.

Contributions to OREPA's work may be sent to P O Box 5743, Oak Ridge, TN 37831 or may be made securely on-line at OREPA's web site: www.orepa.org. All gifts to OREPA are tax deductible.

The Next Generation Youth Organizing Fund



MEMBER OF THE ALLIANCE FOR NUCLEAR ACCOUNTABILITY



MEMBER OF ICAN 2017 NOBEL PEACE PRIZE

Russia's Invasion of Ukraine

one year anniversary

February 24 marked the one year anniversary of Russian President Vladimir Putin's invasion of Ukraine, which he called a "special military operation." Since the war began, thousands of Ukrainians have been killed and millions more have been forced from their homes.

HISTORY OF THE INVASION

Dating back to November of 2021, Russia began a large buildup of troops and military equipment along its border with Ukraine. By February 2022, defense analysts estimated that almost 200,000 Russian troops were surrounding Ukraine and warned that a Russian invasion was imminent. However, Putin dismissed these accusations. While Western leaders consulted with both Putin and Ukrainian President Zelensky to swat down a Russian invasion, Putin issued demands, including de facto veto power over NATO expansion and the containment of NATO forces to countries that had been members before 1997. In other words, this would remove the NATO security blanket from eastern and southern Europe. Putin's demands were rejected. On February 21, 2022, Putin responded to his rejected demands by recognizing the independence of the self-proclaimed people's republics of Donetsk and Luhansk in Ukraine and ordered Russian troops into Ukrainian territory as "peacekeepers." Western leaders responded by placing sanctions against Russian financial institutions. In the early morning hours of February 24, 2022, Putin announced the beginning of a special military operation and, within minutes, explosions were heard in major cities across Ukraine. Around the world, leaders condemned the attack and promised harsh sanctions against Russia.

AFFECT ON THE GLOBAL ARMS RACE

The political pressure to build nuclear weapons among the US and Russia is a vicious cycle. The US is a big driver for Russian production while Russia is a big driver for American production. Russia's nuclear modernization programs, combined with an increase in the number and size of military exercises and credible explicit nuclear threats against other countries stimulate increased defense spending, nuclear modernization programs, and political opposition to further nuclear weapons reductions in the US. However,

the US is also a driver for Russia's nuclear modernization programs.

After Russia's invasion of Ukraine and Putin's explicit and credible threats to use nuclear weapons, there is a stronger focus on nuclear weapons, but with more focus comes US pressure and policies to ramp up our nuclear weapons production. The invasion has essentially started a new global arms race. The Department of Energy's National Security Administration (NNSA) currently has in-process and planned programs to modernize or extend the lives of nuclear warheads, along with ambitions to pour tens of billions of dollars into the nuclear weapons production complex. These programs would ensure that the US continues to possess nuclear arms through the end of the 21st century. Biden's defense budget also reflects Putin's actions. All the money he asked for, and an additional half a billion dollars for Savannah River pit production, was approved—this is a 17 percent increase in the previous year's nuclear weapons budget!

The new global arms race is further reflected in the sheer number of nuclear weapons nuclear states, especially the US and Russia, possess. According to the US Defense Department, at the beginning of 2022, the US maintained an estimated stockpile of 3708 nuclear warheads, with 1744 currently deployed on hair-trigger alert. After Russia's invasion and NNSA's modernization programs, these numbers are expected to grow. Russia's numbers are also large. As of the beginning of 2022, the *Bulletin of Atomic Scientists* estimates that Russia has a stockpile of 4477 nuclear warheads. These high numbers on both sides are alarming, especially after New START negotiations, the only remaining major arms control pact between the US and Russia, have been suspended, along with Putin saying the risk of nuclear war is increasing. With the solemn one year anniversary and the resulting new global arms race, it is important for us to take time to think about the Ukrainian people and the devastating affects of war and weapons of mass destruction on humanity. We must look towards building support to creating a nuclear-free world.

MLK Community Conversation resumes in person!

MLK weekend in Knoxville showcases a variety of events to honor the legacy of Dr. King, with one of those events being the MLK Community Conversation. The MLK community conversation is an event that holds an extremely high value to OREPA and to the members of the community. This year, we were lucky enough that the event was able to be held in person for the first time since the start of the pandemic! It was so nice to be able to physically gather at the Beck Center and discuss how to challenge racial disparities. We had three speakers to speak on 3 different types of disparities—access to food, education, and healthcare. Chris Battle spoke on access to food, Joe Maddox spoke on education, and Kimberly Evans spoke on healthcare. The speakers were incredibly eye-opening and sparked much-needed table conversations on how to challenge these disparities and work towards equality. We really appreciated the diversity of the room, which allowed us to take our conversations home with us and really reflect on what we had learned.



Doomsday Clock set at historical 90 seconds to midnight

How close exactly is humanity to an existential crisis? According to the *Bulletin of Atomic Scientists*, extremely close. Every year, the *Bulletin of Atomic Scientists* sets the Doomsday Clock, a symbolic representation of the state of manmade existential threats, such as nuclear weapons, in relation to midnight. The closer the hands of the clock are to midnight the worse off for humanity. This year, the clock was set 90 seconds to midnight. The primary reason for the *Bulletin* setting the hands so close to midnight is Russia's invasion of Ukraine and Putin's very explicit and credible threats to use nuclear weapons.

The *Bulletin's* announcement made it seem like all is despair and there's nothing we can do. However, this is a moment for action. The Doomsday Clock must be the motivation for people all over the world to rally behind the plan to eliminate nuclear weapons through the Treaty on the Prohibition of Nuclear Weapons, which in 2021, declared nuclear weapons illegal under international law. We need to rally countries to join the 92 countries that have signed on. The TPNW also provides a framework for new negotiations between nuclear armed states and their allies, with

the 2023 G7 leaders summit in Hiroshima providing an opportunity to kickstart that process. So even though the Doomsday Clock might seem like a moment of despair, we have an opportunity to use this to further activism surrounding nuclear weapons and the TPNW provides the framework to do so.

OREPA used this announcement as an opportunity to highlight the threat of nuclear weapons and to point to the TPNW as the path away from the abyss. At midnight, OREPA members and supporters gathered at Church of the Savior with media presence to make an announcement, which made the evening news, about the Doomsday Clock and the need to rally behind the TPNW. We encourage everyone to use the clock announcement to do the same!



Financial Impacts of the Bomb

With tax season coming up, finances are on everyone's minds!

The bomb presents divestment opportunities for companies and luckily for us the Don't Bank on the Bomb report presents public information on investments. This report is the only regularly published source of information on private companies involved in the production of nuclear weapons and their financiers. The report examines contracts for the production of key components of nuclear weapons and provides information on financial institutions seeking to profit from these production activities.

The most recent report showed that 306 financial institutions made over \$746 billion available to 24 companies heavily involved in the production of nuclear weapons in the past two years. The financial sector has an opportunity to reinforce the international norm against nuclear weapons. It is important for us, as the public, to put pressure on nuclear weapons producers to cut production of weapons of mass destruction from their business strategies.

The information in the report allows us another opportunity to demand change. The report can be viewed at: <https://www.dontbankonthebomb.com>

Fire at Y-12 exposes ongoing danger

For the past decade, the Oak Ridge Environmental Peace Alliance has pushed the National Nuclear Security Administration and government oversight agencies to address the ongoing deterioration of the facilities being used to produce nuclear weapons. Some of the worst of these aging facilities are at the Y-12 complex in Oak Ridge.

On February 22, a fire broke out at the oldest uranium processing building at Y-12—Building 9212. This building dates back to 1945 and is one of the deteriorating buildings set to be replaced by the pending Uranium Processing Facility bomb plant.

NNSA said uranium material was involved in the fire but, according to them, the fire is not impacting the public or anything outside of Y-12. “Appropriate precautionary protective actions have been initiated for Y-12 employees who are in the vicinity of the incident and who are not involved in the emergency response. At this time, there is no off-site impact to the public as a result of the incident,” NNSA said.

Authorities at Y-12 said the facility’s radioactivity alarms did not go off, which they said is a sign that harmful radiation did not escape the equipment. Until NNSA provides more information about the cause and extent of the fire, we cannot accept their assurances at face value.

This fire is just the tip of the iceberg; weekly reports from the Defense Nuclear Facilities Safety Board have been reporting ongoing system failures at Y-12. Hearing about this latest incident, one federal official with knowledge of the conditions at Y-12 said, “This won’t be the last fire.”

OREPA has argued that NNSA and safety officials should establish some safe-operations standard, a bottom line below which they will not allow the facility to continue to operate.

OREPA’s argument harkened back to a speech we heard in 2001 in Albuquerque, New Mexico, where the site manager for the Y-12 complex said the bomb plant was operating in “run-to-failure” mode. In the case of dangerous facilities like those at Y-12, it is important to have benchmarks of failure, a way to measure the increasing danger, so the cumulative effects of deterioration can be assessed and the decision to shut down operations in a building or part of a building happens the day before they experience a catastrophic failure, not the day after.

While oversight agency officials agreed with us, there was apparently little they could do to compel NNSA to develop a safety standard and a shut-down plan. NNSA preferred to live in denial, or perhaps they enjoyed the thrill of gambling with worker and public safety and health.

And yet — sometimes, when government officials are trying to justify their budget requests to the congressional committee that holds the purse strings, they have to abandon the false assurances they usually deliver to the public and tell the truth. Those moments provide glimpses into the reality at nuclear weapons sites.

One of those moments happened when the Administrator of NNSA testified that “NNSA’s infrastructure is in a brittle state that requires significant and sustained investments over the

coming decade to correct. There is no margin for further delay in modernizing NNSA’s scientific, technical, and engineering capabilities and in recapitalizing our infrastructure needed to produce strategic materials and components for US nuclear weapons.”

This admission, and previous work by the Defense Nuclear Facilities Safety Board, led to a

formal Recommendation by the Safety Board to DOE in 2020. The DNFSB said the Department of Energy needed to “maintain a robust safety posture and strong regulatory framework to ensure that both its aging facilities and infrastructure and its new facilities provide adequate protection of public health and safety. DOE will need clear requirements and guidance for its staff to follow and enforce.”

Two of the facilities at Y-12 are called out in the DNFSB report. In the process of cutting back the scope of the UPF bomb plant, NNSA announced that it would continue enriched uranium bomb operations in two old facilities that do not meet current environmental and safety standards—Buildings 9215 and Building 9204-2E. At the time, NNSA stated that it would not upgrade those facilities to meet safety standards because doing so would cost too much money. At least one federal official with insider knowledge told us then that it was not a choice; upgrading the aging facilities to meet current earthquake standards was not possible.

In a letter to the Safety Board last year, the Secretary of Energy stopped short of guarantee-

NNSA announced that it would continue enriched uranium bomb operations in two old facilities that do not meet current environmental and safety standards

ing that all facilities were operating safely; instead she said “DOE believes its existing nuclear safety regulatory framework is fully adequate to provide reasonable assurance of adequate protection of public and worker health and safety across the DOE defense nuclear complex.”

In other words, good enough. But in the next sentence, Secretary Granholm admits things are not as good as they can be. “DOE believes that improvements can be made and has also developed an implementation plan that will meet the safety improvement objectives of the DNFSB’s Recommendation 2020-1.”

Read any one of the Safety Board’s weekly reports on Y-12 and you are likely to say, “Well, that doesn’t sound good.” But the incidents reported there, taken by themselves, are not usually alarming.

But keep a list, week after week, and the story begins to look different. Clearly, the DOE’s safety structures, systems, and components do not always perform their safety functions.

Here’s an excerpt from the January 20, 2023 report:

The resident inspectors and NPO criticality safety engineer conducted a walkdown of the Building 9212 casting wing. The resident inspectors observed CNS respond to two separate criticality safety issues during the walkdown. The first issue was rainwater intrusion that had pooled on the floor and flowed under casting line equipment. CNS responded by establishing a nuclear criticality safety (NCS) administrative boundary per the CNS procedure for an abnormal condition involving fissile material.

Rainwater intrusion, of course, from a roof leak, in a deteriorating facility.

Criticality safety requires that enriched uranium be isolated from water; water is a reflector of neutrons and can cause an otherwise safe arrangement of nuclear material to become dangerous.

Rainwater was not the only problem—in late December, East Tennessee experienced an unusually hard freeze that lasted for more than a day. In the nuclear weapons production buildings at Y-12, buildings that are poorly insulated, the freeze put Secretary Granholm’s assurances to the test. The assurances failed.

The Safety Board’s report from December 30 noted some operations were suspended when heat was lost, and workers had to contend with “multiple leaks from various water systems.” In Building 9215, operations were shut down for five days because of the failure of a cooling fan that

overheated coils and triggered fire sprinklers. The contractor declared an occurrence for “the degradation of a safety significant system.”

The site’s backup emergency operations center flooded when a pipe broke—no one noticed for three days because of the Christmas holiday; the building sustained “significant damage,” and was “rendered unavailable for use.”

The contractor at Y-12, Consolidated Nuclear Services, is evaluating the multiple failures to see if they are due to “advanced age” or if the prolonged freeze exceeded the design criteria. Either way, of course, the Secretary’s assurances are exposed as inadequate to protect the health and safety of workers and the public. They may exist on paper, but they are not evident in the real world.

Throughout the year, the Safety Board’s reports tell stories of failing equipment, critical safety incidents, valve leaks, and work suspensions. Few of these are attributed to worker error. None of them are reported in the local media.

The Safety Board’s December 23 report documents a significant personnel contamination at Y-12 when a worker’s arm became contaminated while they were cleaning

a cooling tray. The Safety Board noted that the decontamination process, which included shaving the worker’s arm, did not follow proper procedures and had the potential to increase the dose consequences to the worker. While the report on the incident was being prepared, the contractor intervened and removed details of the decontamination errors from their report.

The report noted the event was the sixteenth contamination event of the year, and it was the most significant. No report has yet determined how the contamination happened.

The Y-12 fire underscores OREPA’s point that the equipment used to produce nuclear weapons components in Oak Ridge, including many of the safety systems, and even the buildings themselves, are failing on a regular basis. And it seems far more likely than not that one day a failure will occur that will break the camel’s back. The resulting catastrophe—whether it be harm to workers, releases to the environment, health risks to the public, or all of the above— is, at this moment, completely preventable.

We don’t know when that day will be. We only know that we can see it coming. And we know the government is not doing enough to stop it.

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