

# Nukewatch Celebrates Nuclear Ban Treaty's First Anniversary

By Kelly Lundeen

For people struggling to achieve peace, the war in Ukraine reinforces feelings of grief and despair, yet the anti-nuclear global majority continues to move slowly toward nuclear abolition. The year 2021 saw eight more nations ratify the United Nations Treaty on the Prohibition of Nuclear Weapons (TPNW), bringing the total to 60 ratifications and 86 signatories. Even though the nuclear weapons states have not caught onto the nuclear weapons ban trend, the U.S. government was reminded on January 22 when, despite ongoing Covid restrictions, nearly 60 events took place to celebrate the first anniversary of the entry into force of the TPNW, all with the same message — join the Treaty!

The Nuclear Ban Treaty Collaborative (NBTC), of which Nukewatch is a founding member, coordinated a day of action, creating resources and

hosting zoom calls to bring the nationwide movement together again this year. Around the country, groups marked the occasion by dancing, banner, singing, bell ringing, moments of silence, flower delivery, letter delivery, Treaty delivery, and sharing cupcakes. Ralph Hutchison of Oak Ridge Environmental Peace Alliance created an inspiring video compilation of many of these actions.

Nukewatch participated in this year's day of action through our webinar production with the Affected Communities & Allies Working Group, one of four working groups in the NBTC. Two hundred ninety people registered for the zoom webinar we called "Nuclear Colonialism in the Age of the Ban Treaty." Both videos can be found at: [nukewatchinfo.org/videos](http://nukewatchinfo.org/videos).

The seminar highlighted the lived experience of speakers and artists from affected communities to

activate our collective work toward disarmament. They wove together the history of nuclear colonialism from uranium mining, nuclear testing, production, and use. One of the speakers and a member of the Affected Communities & Allies Working Group, Benetick Kabua Maddison of the Marshallese Educational Initiative, quoted his uncle David Kabua, president of the Marshall Islands: "Before the nuclear testing program the Marshallese people had no allies. But 76 years later we have allies all over the world, simply because of us using our voices to raise awareness about these issues that are impacting us."

Please join the Nuclear Ban Treaty Collaborative to promote the TPNW and open more spaces where impacted voices can be elevated. Find out how to get involved in a working group and watch for upcoming action alerts at: [nuclearbantreaty.org](http://nuclearbantreaty.org).

## Fukushima's Endless Cleanup: Mistakes Prompt More Decontamination

By John LaForge

Tokyo Electric Power Co. (Tepco) plans to pump all 1.27 million tons of its contaminated water — which is peppered with over 60 radioactive materials and now stored in over 1,000 giant tanks onshore — into the Pacific Ocean commons. The water gets contaminated because it is pumped inside the three destroyed Fukushima reactors to cover hundreds of tons of thermally and radioactively hot, melted, destroyed reactor fuel (called "corium"). Tepco workers pump the water in to keep the fuel wreckage from going "critical," melting further, and spewing more radiation. Additionally, tons of groundwater pours into the reactor building basements through earthquake cracks in the foundations, and it also passes over the corium, becoming intensely radioactive. The amount of waste water increases every day by 140 tons, Tepco says.

The company claims to be running out of storage space on land for the giant tanks (although the fishing community, environmental watchdogs, South Korea, China, and other Pacific Rim countries have contested the claim).

Now, copying the likes of France and Britain before them, Tepco and the government announced last year that the company will build a huge drain pipe and pump its pollution into the Ocean. This caused an international uproar, but the plan is moving ahead with federal government approval.

Then last summer Tepco announced that it will drill an undersea tunnel 40-feet deep and about 0.62 miles long for a wastewater drain, and said it would start drilling by the end of March 2022. The 8.2-foot diameter tunnel "requires penetrating the bedrock about [36 feet] below the surface of the [seafloor], according to the utility," the daily *Asahi Shimbun* reported last August 26. "We have no idea how fast we can dig into the seafloor until we conduct a drilling survey into the bedrock," a Tepco official told the paper.

Tepco's tunnel idea replaces its earlier plan to lay a pipeline on the seabed. On December 20, 2022, ARD-TV Germany reported the puzzling explanation that, "The tunnel will run below the seabed so that it is not damaged by an earthquake or tsunami and by the current." It was unclear how earthquakes — like the monstrous 9.0 magnitude that struck March 11, 2011, and actually moved the landmass of Honshu Island, Japan's largest, one full meter — would not damage bedrock. Severe earthquakes have repeatedly rocked the Fukushima region of northeast Japan since 2011. The most recent was a frightening 7.4 magnitude quake on March 16, 2022.

Agence France Press reported that Tepco's "chief decommissioning officer Akira Ono said releasing the water through a tunnel would help prevent it flowing back to the shore." Ono went on to say, "We will thoroughly explain our safety policies and the

measures we are taking against reputation damage," appearing more concerned about the company's image than about its contamination of the Pacific Ocean food web.

After Tepco acknowledged that its water filter system failed to remove radioactive materials as



One-ton bags of cesium-contaminated soil, leaves, wood and litter scraped from the ground after the triple meltdown at Fukushima.

promised, the company has said it will re-filter the water already in its tanks. In addition, the company says the water will be diluted 40-to-1 with regular seawater before being pumped into the Pacific. One-million tons is so large a volume that Tepco estimates its re-filtering, diluting and dumping scheme will take 40 years to complete.

### Decades-long practice of ocean dumping

Tepco's ocean dumping plan recalls France's practice at La Hague, where a waste "reprocessing" system has for decades pumped liquid radioactive effluent into the English Channel. Greenpeace has reported that La Hague dumps "one million liters [264,000 gallons] of liquid radioactive waste per day," and the *British Medical Journal* published a study in 1997 that warned of an increased risk of leukemia for children who played regularly on beaches near La Hague's effluent pipe.

Britain's reprocessing complex at Sellafield pours radioactive waste through a mile-long pipeline into the Irish Sea, waste that's known to be contaminated with plutonium, cesium, and other radionuclides. Radioactivity from the site was picked up in shellfish in Ireland, Norway, and Denmark, and in local seafood. "The nuclear industry's irresponsible 'out of sight-out of mind' approach must now stop for good," said Greenpeace nuclear campaigner, Diederik Samsom, on June 26, 2000. Instead, the corporate contamination of the world's greatest ocean with privately owned radioactive waste is being franchised to Japan, in order to cut costs.

### Twenty-two Million Tons of Bagged Rad Waste

The *Washington Post* has reported that at Fukushima vast "quantities of contaminated soil and water are being stored onsite while political leaders decide what to do with it..." But millions of bags of waste are not just "onsite."

About two inches of the ground was scraped up from fields, flower beds, parks, and playgrounds across some 324 square miles in 52 cities, Germany's *Deutsche Welle* reported. Millions of one-ton plastic bags filled with contaminated soil, leaves, wood chippings, and other debris are piling up outdoors in thousands of places awaiting transfer to a landfill just outside Fukushima.

The massive landfill may eventually hold up to 22 million bags of the waste, the *Los Angeles Times* reported. Ten-ton trucks can carry only seven of the heavy bags at a time, the *Times* said, noting that "At that rate, transport could take decades. Material might have to be put into fresh bags if they start to break down before they can be moved."

## A Turn for the Worse

By Robert Hunziker

The cooling water continuously poured over the reactors' creakily dilapidated ruins turns radioactive, almost instantaneously, and must be processed via the Advanced Liquid Processing System (ALPS), intended to remove most radioactive materials....

Here's the big new danger: As ALPS processes radioactively contaminated water, it flushes out a "slurry" of highly concentrated radioactive material....

How to handle and dispose of the radioactive slurry may be an impossible quagmire, and a big one, since the storage containers for the tainted slurry quickly degrade because of the high concentration of radioactive, caustic, corrosive chemicals in the material. The storage containers, in turn, have to be regularly replaced as the slurry's caustics eats away at the containers' liners.

Radioactive slurry is muddy and resembles a shampoo in appearance, and it contains highly radioactive strontium readings that reach tens of millions of Becquerels per-cubic-centimeter. However, according to the EPA 148 Becquerels per-cubic-meter, not centimeter, is the allowable level for human exposure. Thus, Becquerels in the tens of millions per-cubic-centimeter is "off the charts" dangerous....

Since March 2013, Tepco has accumulated 3,373 special vessels that hold these highly toxic radioactive slurry concentrations. But, because the integrity of the vessels deteriorates so quickly, the durability of the containers reaches a limit, meaning the vessels will need replacement by mid-2025.

Transferring this slurry is a time-consuming, highly dangerous, even horrific job, which creates yet a second series of unacceptable risks of radioactive substances released into the air during transfer of slurry. Tepco expects to open and close the transfers "remotely" (using robots). But as of January 2, 2022, Tepco had not yet revealed acceptable plans for dealing with the necessary transfer of slurry from weakening, almost deteriorated containers, into fresh, new containers. ("Tepco Slow to Respond to Growing Crisis at Fukushima Plant," The *Asahi Shimbun*, January 2, 2022)

— Robert Hunziker lives in Los Angeles. This is an excerpt from a longer piece at *Counterpunch* Jan. 10, 2022.