

Earthquakes and Train Wrecks and Radioactive Waste, Oh My!

By Kelly Lundeen and Leona Morgan

If you check the U.S. Geological Survey (USGS) interactive map you can pinpoint all the earthquakes that have happened in the past day on the entire Earth. Most people believe earthquakes happen along fault lines related to uncontrollable shifts in tectonic plates. Nowadays, modern oil and gas production alters that simplistic view when wastewater is injected back into the ground inducing human-made earthquakes.

On November 16, 2022, the largest earthquake ever to hit the Permian Basin in west Texas and southeastern New Mexico, with a magnitude of 5.4, shook an area over 300 miles in diameter. *Forbes* reported November 25 that the frequency of earthquakes in the area has risen exponentially since the recent boom in oil and gas production. Until 2016, there were fewer than 10 quakes of magnitude 3.0 and less per year. In shocking contrast, during 2022 there were a projected 185 quakes of the same strength. If you visit the USGS website daily you are more likely than not to find an earthquake in the Permian Basin within the past 24 hours.

What does this have to do with radioactive waste? The consolidated interim storage (CIS) site for radioactive waste from commercial nuclear energy production proposed by Holtec International is only 60 miles from the November 16 quake. Also within the Permian Basin is a second CIS proposed by Interim Storage Partners (ISP), approximately 40 miles east of the Holtec site and the Waste Isolation Pilot Plant (WIPP) for nuclear weapons waste, 14 miles south of the Holtec site.

Seismic activity or not, a recent statewide poll commissioned by the Center for Civic Policy of 1,015 New Mexican voters shows they overwhelmingly

oppose the storage of the waste in their state, even temporarily, with 60 percent opposing, 30 percent in favor, and 10 percent undecided on the project. The poll points out the projected accident rate for rail transportation from the Final Environmental Impact Statement: 13 accidents over a 20-year period. The recent train derailments in Ohio bring to mind



the harrowing risks to communities along waste transportation routes running from nuclear reactor sites to the Southwest.

Don Gallegos, New Mexico Transportation Division State Legislative Director for the International Association of Sheet Metal, Air, Rail, and Transportation Workers, states, “Safety on the railroads is neither negotiable or certain. The 2023 accident in East Palestine, Ohio is a failure in automation and precision scheduled railroading.”

The two largest counties in New Mexico, Bernalillo and Doña Ana, have passed resolutions opposing the proposed CIS and transport, joining a list of Indigenous Nations, municipalities, and counties in New Mexico and Texas. The governor of New Mexico has agreed to sign legislation requiring state consent for a radioactive waste storage facility if it were to arrive at her desk, as was done in Texas.

That is exactly the intention of New Mexico Senate Bill 53. At the time of publishing, the New Mexico Legislature had less than 10 days to pass this legislation which was already approved by the New Mexico State Senate and the House Government, Elections and Indian Affairs Committee. SB53 must pass the House Judiciary Committee and House Floor before it lands on the Governor’s desk.

Meanwhile, the Department of Energy (DOE) continues to promote a paid “consent-based siting” process. DOE has offered \$26 million to 16 communities nationwide willing to consider hosting the waste. DOE will announce the awardees in summer 2023.

The Holtec proposal in New Mexico is expected to receive the Nuclear Regulatory Commission’s rubber stamp for its license in March, while the ISP project was approved in 2021. Despite this green light, legal challenges and potential state laws may prevent these CIS sites from operating.

— U.S. Geological Survey, Mar. 8; Beyond Nuclear, Jan. 26; New Mexico SB53; Demand Nuclear Abolition press release, Jan. 10, 2023

— *Leona Morgan (she/her) is a Diné activist and community organizer fighting nuclear colonialism, based in Albuquerque, New Mexico.*

Canadians Demand Ban on Plutonium Reprocessing

By Brennain Lloyd

In 2020, the Canadian federal government committed to review its radioactive waste policy, nine months after an international investigation concluded the policy was inadequate. Hundreds of Canadians and civil society organizations participated in a series of roundtable discussions convened by Nuclear Waste Watch with Natural Resources Canada – the federal department leading the review. Thousands submitted comments in letters, briefs, online, or by email.

The messages focused on the need for an independent agency, at arms-length from the government and industry, to oversee radioactive waste management and decommissioning. The comments asserted policy should direct perpetual care and monitoring of radioactive wastes rather than abandonment, such as in a deep geological repository (DGR). The public called on government to be more transparent in managing and transporting radioactive waste, and to give Indigenous peoples and other Canadians a right to access information, to engage in decision making, and to know the risks associated with radioactive waste. Quite explicitly, thousands of Canadians called for a policy that would prohibit the extraction of plutonium from radioactive fuel waste by reprocessing, including by “pyro-processing,” citing environmental, security, and proliferation issues.

In February 2022, Natural Resources Canada released a draft of their radioactive waste policy, which was disappointing in its superficiality and its failure to protect people and the environment. The draft policy did not establish independent oversight for the nuclear industry and nuclear operations or direct a national standard for the characterization of radioactive waste and maintenance of a verified inventory. It placed the nuclear industry in charge of waste management and identified no role for the federal government, Indigenous peoples, or civil society in developing and implementing an “integrated strategy” for radioactive waste. The draft policy also failed to prohibit reprocessing radioactive wastes, saying only that “deployment of reprocessing technology ... is subject to policy approval by the Government of Canada” refusing to illuminate what that “policy” might be.

The matter of reprocessing and the need for a formal policy banning the extraction of plutonium has become more urgent in the two and a half years since the federal policy review was launched. The federal government has endorsed and even funded the development of a new generation of reactors, at least one of which would employ reprocessing of radioactive fuel waste from a Canada Deuterium Uranium (CANDU) pressurized heavy-water reactor.

Canada has had an informal ban on reprocessing since the 1970s, following India’s testing of its first nuclear weapon – made using plutonium from a “peaceful” nuclear reactor, a gift from Canada. However, the informal ban was breached in 2021 when the federal government granted \$50.5 million to a New Brunswick company, Moltex Energy, to develop its technology to reprocess fuel waste from existing CANDU reactors with the intent of exporting the technology.

The government also granted more than \$1.2 billion to Canadian Nuclear Laboratories (CNL) to expand their nuclear research center at Chalk River to include a laboratory for research on plutonium reprocessing. This was despite a 2016 CNL report that found no business case for reprocessing CANDU waste, in part “due to its low fissile content,” and the associated costs and risks. The CNL report also stated that reprocessing would “increase proliferation risk.”

In mid-December, a national alliance of civil society organizations launched a sixteen-week campaign to formally demand that Canada include a ban on plutonium reprocessing in its radioactive waste policy. The groups cite proliferation risk and environmental contamination as major concerns, but communities fighting proposals for DGRs for the burial of high-level nuclear waste have also raised the concern that centralizing all of Canada’s high level waste may be a stepping stone for the nuclear industry to then add a reprocessing facility to the operation.

The campaign also links reprocessing risks to the current push by industry and support by government for so-called ‘small modular reactors.’ Every two weeks the campaign releases a new short video, theme message, and a call for action in the form of letter writing, visits and calls to members of parlia-

ment, and other public actions. To learn more about the current campaign visit reprocessing.ca or go to www.nuclearwastewatch.ca to read about the radioactive waste policy review.

— *Brennain Lloyd is a public interest researcher, writer, and community organizer in northeastern Ontario, working with Northwatch, a regional coalition of environmental and social justice organizations, since the 1980s.*



Nukewatch Quarterly

The Progressive Foundation & Nukewatch
740A Round Lake Rd., Luck, WI 54853

Phone: (715) 472-4185

nukewatch1@lakeland.ws / www.nukewatchinfo.org

ISSN: 1942-6305

~ Printed on 100% recycled paper ~

Please subscribe: \$25/yr.

**Nukewatch is a project of The Progressive Foundation
a 501(c)(3) non-profit organization**
founded in 1979 by Samuel H. Day, Jr.

Progressive Foundation Board of Directors
Gail Vaughn, Arianne Stewart Peterson,
Jeff Peterson, and Bonnie Urfer

Nukewatch Staff

Kelly Lundeen, Lindsay Potter,
Felice Cohen-Joppa, and John LaForge

Volunteers

Bonnie Urfer, Mike, Ann & Kristin Boland, Linda, Mike & Jim Miles, Barb Kass, Steven Hobert, Jane Leech, Jan Boudart, Laura Gauger, Matthew Jahnke, Sharyl Manwiller, Al Zook, Sadie Green, Barbara Mishler, Sharon Cody & 60 bulk distributors.

The *Quarterly* and nukewatchinfo.org
do not sell advertising.

In accordance with Title 17, USC Sec. 107, they are distributed without profit or payment to those who have expressed a prior interest in them for non-profit informational, research, and educational purposes only.

Nukewatch’s office is located on the traditional, ancestral land of the Anishinaabe.