



Save Ohio Parks
End Fracking Of Public Lands

Ohio Senate Energy Committee

Opposition Testimony

Senate Bill 294

Melinda Zemper, Save Ohio Parks

Chairman Chavez, Vice Chair Landis, Ranking Member Smith, and members of the Senate Energy Committee,

Thank you for the opportunity to present opposition testimony for Ohio Senate Bill 294.

I am Melinda Zemper of West Chester, Ohio, and a board member of Save Ohio Parks. We are a nonprofit organization dedicated to educating the public about the harms fracking under Ohio's state parks and public lands causes to our health, the environment and the planet.

Senate Bill 294 energy bill contains two glaring errors that should disqualify it from advancing it further in the political process. In Items 4(b) sections i) and ii), energy from nuclear reaction and natural gas are listed as "clean" energies.

They are not. In fact, they are both dirty and dangerous and have the capability to destroy our health; our clean air, water and arable agricultural soils; our state parks and public lands; and our children and grandchildren's very survival.

Let's start with nuclear power.

Storing nuclear waste has always been the major issue with nuclear. While some nuclear waste is stored in approved facilities across the country, the majority of it is [stored on-site at the reactor facilities](#) where it was generated. There are about 90,000 metric tons of nuclear waste in the U.S. today. A big concern includes the environmental risks associated with long-term, on-site storage, including the possibility of corrosion, degradation of storage containers over time, and the potential for accidental releases.

While accidents within the nuclear industry are rare, when they occur, they have significant, lasting effects. A 1,000 square mile exclusion zone around Chernobyl, Ukraine, remains in effect today since the accident because of fears of radiation poisoning for the general population. That accident occurred in 1986. And Fukushima, caused by an earthquake and tsunami in 2011, caused the displacement of 164,000 people, 41,000 of whom remain evacuees today. Costs of both accidents are in the hundreds of billions of dollars.

Can you imagine the fallout, both physical and reputational from a nuclear accident at either the 55-year-old David Besse or 40-year-old Perry Nuclear Power plants?

Radium is often present in nuclear waste and its decay products. Just the half-life of Radium 226 and 228, which are bone-seeking and cause cancer in humans, is 1,600 years.

In Portsmouth, Ohio, we see continue to see the effect poor federal nuclear waste management has had on people living near the Portsmouth Gaseous Diffusion Plant (PORTS), which processed uranium during the Cold War.

Piketon is a sacrifice zone and radiation from plant operations continues to risk the health of residents living locally. Poor waste management there has contaminated the surrounding area's air, soils and water with radiation exposure, causing a [premature death rate in Pike County](#) for people 74 years and younger to be 107% higher than the U.S. average. That's 750 early deaths from cancers and other diseases in a county with a population of only 27,088. [Cancer clusters and early death rates](#) in the area from radioactive exposure have been reported on for years in local and regional media.

Now OKLO and Jeff Zuckerberg's Meta Platforms have announced a joint project to build a [series of micro-nuclear plants](#) to run a 1.2 GW power plant on 200 acres on land once owned by the Department of Energy. It would be one of the largest advanced nuclear energy investments in the state and a major expansion of power supply for Meta's growing data-center operations.

How will that impact residents? How do they feel about that double-whammy of health risks that could realistically descend upon them?

For Ohio lawmakers to call nuclear energy a "clean" energy is an insult to people who live daily with the life-threatening health effects of the federal government's outdated energy policy, along with its poor planning.

Effectively, the problems with nuclear energy waste are like problems with oil and gas industry waste storage in Ohio: Ohio's lax regulation and poor waste management endanger us all.

Methane emissions, accidents, venting and flaring from fracked gas production and use risks our health; our environment; biodiversity in our state parks and public lands; our air quality and drinking water; and a livable planet.

It's time to admit it: natural gas is not 'clean' energy. Methane gas, the main component in natural gas, is volatile, dirty and dangerous. Ohio has recorded nearly 2,000 incidents in the gas and oil industry over the last eight years alone. Those accidents include well pad explosions (one that killed two people last summer), leaking conventional, orphaned and injection wells, and oil and gas wastewater brine spills into creeks and streams which have killed fish and wildlife.

It's safe to say that everyone except the industry itself and those who benefit financially from its investments, subsidies, tax-exemptions and political donations want natural gas gone once they learn of the harms fracking causes.

Methane gas emissions from fracked gas are accelerating planet warming and climate change. Climate change is already negatively affecting our weather, our health and our future.

Fifty years ago, Americans were told natural gas was a less-polluting alternative to coal and oil while the transition to renewable energy occurred. Fifty years is a long transition. It's time to rip off the Band-Aid.

The problems with natural gas are many-- and serious. Methane gas emitted from natural gas production, venting and flaring [increase rare cancers in small children](#) who live near production facilities. Methane emissions also cause COPD, asthma, hormone disruption, low fertility, low birth weights and other chronic illnesses.

Global Energy Monitor, which develops and analyzes data on energy infrastructure, resources, and uses, estimates that [if the U.S.'s slated AI data center buildout continues](#)—which includes adding to [Ohio's 195 AI data centers](#)-- global natural gas capacity will grow by 50 percent and greenhouse emissions from natural gas-powered power plants on site will grow with it.

The planet already breached 1.5 degrees Fahrenheit globally the last three years in a row. That kind of growth in carbon dioxide and greenhouse gas emissions puts the planet on a trajectory where [the climate system will likely move into an era of accelerated warming that may be impossible to halt](#).

How can the amount of methane emissions be called 'clean' when our planet is already in crisis? Those who insist on it are foolish by pretending it is.

Science is clear. The entire world around us is embracing renewable energies like wind, solar and geothermal to mitigate the worst effects of climate warming and climate change.

Why isn't Ohio?

Natural gas production and Ohio's poor oil and gas waste management threaten our drinking water. Some of the most insidious—but measurable evidence-- against fossil fuels, including natural gas production from fracking under our state parks and public lands, is its documented contamination of our fresh drinking water. Clean water is essential to human life. Without it we will perish.

In the gas and oil industry, part of the fracking process involves drawing in the range of [40 million gallons of fresh water](#) from our rivers, lakes and streams to frack one horizontal well. After fracking, oil and gas is brought up to the surface of the earth, where it's separated from sand, water and unregulated chemicals used in the process. What's left over from the usable gas and oil is called 'produced water,' or wastewater brine.

Radium and unregulated chemicals, (sometimes cancer-causing PFAS) are included in that toxic brew. The wastewater brine is shipped away on un-placarded trucks and shot deep underground into Ohio Department of Natural Resources-licensed injection wells thousands of feet underground. Truck drivers who transport gas and oil waste brine [are not informed or trained](#) about the risk of cancer from brine splashback and exposure.

That toxic, radioactive brine—which can never be purified enough to be drunk by humans or livestock again—is supposed to stay in one place. But concrete well casings crumble and degrade over time. And water percolates through layers of soil and rock underground called pore space. Water moves.

In essence, fracking operations for natural gas depletes our surface fresh water from lakes, rivers and streams and converts it into toxic, radioactive wastewater brine that must be stored underground in perpetuity.

Brine has often migrated in Ohio and other states into orphaned, abandoned wells and even working conventional oil wells miles away from injection points, too. This migration risks contaminating fresh drinking water wells meant for people and animals.

Washington County is the home of 17 Class II gas and oil waste injection wells out of 234 statewide, with two more recently approved by ODNR under old, lax laws. [It's being sued over this](#). These wells are located close to the city of Marietta's groundwater, and local citizens there are [concerned leaking injection well wastewater brine will migrate](#) into their groundwater, contaminating their drinking water for their lifetimes, if not forever.

ODNR has already [closed six gas and oil waste injection wells in Noble and Athens counties](#) over the past few years because of imminent threats to local drinking water there.

Furthermore, gas and oil drilling wastes are also often stored in poorly regulated Ohio landfills, where [toxins can leach into local water and soil, causing health and contamination issues](#) for people living nearby.

Lawmakers cannot honestly call natural gas a 'clean' energy. In fact, the future of Ohio's fresh water is cloudy if you consider what's happening in other gas and oil states.

In West Texas, there are [2,870 active cases of groundwater contamination](#) by gas stations and gas and oil operations, including fracking. Nearly every county there is impacted by the problem. The most recent 252 cases included common gas and oil contaminants benzene, toluene, ethylbenzenes and xylenes. Groundwater contamination is expensive to remediate and can linger for years-- or indefinitely.

In Oklahoma, a state lawmaker has proposed stronger gas and oil waste management and storage laws for the state after [two media organizations identified 150 cases where residential water has been contaminated](#) by injection well migration of toxic oilfield wastewater brine into homes, farmland and local drinking water.

And in Boardman, Ore., a [joint Rolling Stone and Food Environment Reporting Network](#) investigation recently uncovered that Amazon data centers' produced water increased

nitrate levels in a local aquifer. Those nitrates are linked to a startling 25 percent increase in miscarriages and increased cancer and kidney failure there.

We know from history that modern technology is a two-edged sword. New technology always has costs. It took about 55 years for commercial fishermen to overfish and deplete native fish populations in Lake Michigan in the late 19th and early 20th century. To this day, the lake is seeded annually with fingerlings, of which only a percentage survive.

It took less than 30 years in the late 19th century for the U.S. logging industry to drain and deforest the Great Black Swamp in Ohio with ditches, canals and draining tiles. How many species of trees, animals, birds, plants, insects and potential medicinal cures were lost when that occurred?

The state of Ohio has allowed fracking on private lands for 15 years. Within the last three years, the state has permitted fracking under state parks and public lands. Salt Fork State Park, six wildlife areas and numerous Ohio Department of Transportation rights-of-way are either being fracked, approved for fracking or are the list to be fracked.

How long will it take for fracking to destroy Ohio's drinking water supply?

Will Ohio be known in the 21st century as a climate haven—with access to clean, fresh water from the Great Lakes, Ohio River and our lakes and streams?

Or will we be another deforested, industrial dead zone, sacrificed to the gas and oil industry and its investors in exchange for short-term fracking lease revenue?

Since the massive snowstorm last week that crippled much of our country, including Ohio and the statehouse, an amendment to SB 294 has been added. It removes the requirement that energy be dispatchable 24/7 to be considered "reliable." But it expands on minimizing energy reliance on a "foreign adversary nation."

It looks to Save Ohio Parks as if the state supermajority is going to attack solar energy supply chains using the "foreign adversary nation" part of this bill to rationalize further cementing natural gas fracking into state energy policy and quash future renewable energy projects that include cheaper and reliable wind and solar. I hope solar panel manufacturers in Ohio are paying attention to this potential issue.

In the divisive political climate we live in now, more countries could increasingly count as "foreign adversary nations," and the governor and attorney general could potentially add any countries to that list.

The amendment doesn't change the overall effect of the legislation -- but we are finding that as Save Ohio Parks submits testimony on various aspects of a bill, the state tends to fiddle with bill language to either address those concerns or quash them by adding more of what the gas and oil industry wants.

Fossil fuel energy, including gas fracking under state parks and public lands, already makes up [95 percent of the energy used in the state of Ohio](#). There is plenty of room here to allow

property owners to earn income from truly clean wind and solar energy by expanding renewable energy in Ohio.

After all, if Ohio truly has an energy emergency-- created by the data center buildout-- why not expand renewable energy and add it to the mix of energy solutions?

For all the listed reasons above, I urge this committee to vote NO on SB 294.

Ohio lawmakers need to develop and implement an ethical 21st century, state energy policy that includes wind, solar, geothermal and other truly clean, reliable, emissions-free and renewable energy sources. We need to begin the transition to renewable energy now.

Anything less harms our health; our clean air, water, and arable farmland; our state parks and public lands; and our children and grandchildren's survival on a livable planet.