

Testimony for CT Senate Bill 103: “An Act Concerning Hydraulic Fracturing Waste in CT”

Brief introduction: I am a CT citizen with background in environmental issues—in particular, fossil fuels and climate change.

This testimony is in support of banning fracking in CT. While industry spokespeople will defend fracking, the evidence of past and potential harm seems so strong as to make it at least prudent and at best incontrovertible that we should be protecting our fellow CT residents. So my testimony, and the remainder of this message, is to offer support for why my State Senators and Representatives should enact legislation to ban fracking waste (both toxic and radioactive) from our State. (For a readable description of what fracking is along with arguments for and against it, see <https://www.livescience.com/34464-what-is-fracking.html>.)

This relatively new technology allows previously non-extractable oil and natural gas, often captured in shale rock, to be extracted by hydraulic drilling, sometimes well over a mile deep, and later transported to other sites. Successful fracking requires injection of a so-called “toxic cocktail” of millions of gallons of fresh water mixed with over 600 chemicals (including known carcinogens), some of which the fossil fuel industry apparently refuses to reveal. Much of this fluid remains in the ground, where its toxicity gradually increases via absorbing radioactivity and other contaminants; that increasingly toxic mix can seep into aquifers that provide farm irrigation and would normally provide drinking water. The rest of the mixture (the part that doesn’t linger underground) is typically dumped into rivers, left in open pits to contaminate the air around it, or driven away in big trucks.

Other immensely harmful results can include:

- Though unspecified by the oil companies, large enough amounts of methane escape and are burned so that the conflagration is visible from space; methane disrupts the earth’s climate 86 times more than coal-burning plants’ emissions of carbon dioxide. (See for example <http://pubmedcentralcanada.ca/pmcc/articles/PMC322989/>)
- Water that escapes is unusable, and when it is stored in open pools, it evaporates to contribute to acidic and toxic rain that proceeds to contaminate dams, rivers and lakes—often far from where the fracking has occurred. (See for example <https://stateimpact.npr.org/pennsylvania/2015/04/20/air-pollution-increases-at-pennsylvanias-natural-gas-sites/>, which includes comments on health consequences of fracking, as covered in the next two bullets.)
- Fracking effects can have direct and indirect effects on human health in general, including increased cancer rates (from Radium-226, with a very long half-life), damage to several essential organs, neurological and developmental problems, respiratory illnesses, compromised immune systems, and damage to fetuses carried by exposed pregnant women. The health of babies and the elderly is particularly at risk from fracking. Some ozone used during the fracking process is released into the air, where it can specifically cause breathing problems and kill crop plants in the area. (See for example <https://www.ceh.org/news-events/press-releases/content/fracking-chemicals-linked-to-respiratory-health-risks/>, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4738074/> and <https://link.springer.com/article/10.1007/s11469-017-9792-5>.)
- In at least some states, during fracking contaminated water has spread into the water table. The health risks are enormous; as evidence, the Pennsylvania Medical Society has called for a moratorium on fracking in the state of PA (see <http://www.psr.org/news-events/press-releases/pennsylvania-medical-society-moratorium-fracking.html?print=t&referrer=https://www.google.com/>).

- After allowing fracking starting in 2008, Oklahoma, which had previously experienced few earthquakes, underwent 889 in the next 7 years, apparently from injection back into the ground of escaping wastewater that further fractured the local sub-surface. Similar earthquake increases after fracking have occurred in other parts of the world. (See for example <http://www.businessinsider.com/oklahoma-earthquakes-why-2017-8>.)
- In Alberta, Canada, unanticipated surface fractures allowed bitumen into nearby lakes, killing wildlife and polluting the landscape. (See for example <https://thetyee.ca/News/2014/02/08/Bitumen-Seepage-Alberta/> and <https://thetyee.ca/News/2014/07/24/CNRL-Seepage-Review/>.)
- Fracking converts a huge “sink” of fossil fuels, previously unavailable, into yet another available source of unrenewable energy, the burning of which adds to carbon dioxide and carbon monoxide in our atmosphere, exacerbating all of the side effects of climate change—global warming, rising seas, melting ice caps, and numerous extreme weather events (mudslides, flooding, major hurricanes such as we have never before seen), and more. In our home state of CT, we have already seen extreme flooding of our coastal cities due to rising seas and unusual hurricanes. (See for example <https://cen.acs.org/articles/94/web/2016/05/Toxic-chemicals-fracking-wastewater-spills.html>)

CT legislators: please think not just of your constituents but also of yourselves, your families, and others you cherish. Vote your conscience for Senate Bill 103 (as well as any future bills that would forestall introducing fracking and the storage and transportation of its gas products into or within CT). Talk to each other. Step outside choosing shorter-term economic benefits (if indeed there are any) over far more overarching, long-term destruction to our and our descendants’ environment and health.

Meanwhile, following CT General Statute 7-148. I shall support my town of Hamden in efforts to ban fracking and its ancillary processes (drilling, extraction, and waste storage).

Respectfully,
Richard Yanowitz, Ph.D.
26 Marion Avenue
Hamden, CT 06518
(203)745-3411
ryanowitz@gmail.com