

### SB0878

## Oil and Natural Gas - Hydraulic Fracturing - Authorization Testimony before the Education, Energy, and the Environment Committee Hearing March 6, 2025 Position: Unfavorable

Dear Chair Senator Feldman and Vice-Chair Senator Kagan, and members of the committee, my name is Julia Lawrence, and I represent the 900+ members of Indivisible Howard County. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members). We are providing written testimony today **in opposition to SB0878**, which would authorize a person to engage in the hydraulic fracturing of a well for the exploration or production of oil or natural gas in Maryland.

# We are opposed to SB0878, because it authorizes hydraulic fracturing, which research has shown to be responsible for both water and air contamination.

Hydraulic fracturing, or "fracking," is a drilling method used to extract natural gas typically from shale, coalbed and tight sands. It involves drilling pipelines deep underground and pumping a solution through the rock formation at high pressures to crack apart the rock and release gas packed within. [1]

The fracking solution used is a mix of water, solid particles and chemicals. Some chemicals used in the fracking solution [2] have been found to include benzene, xylene and toluene, all of which are known carcinogens. [3] Significant volumes of fracking fluid come back up to the surface loaded with heavy metals, toxic chemicals and radio-active materials. [4] This hazardous wastewater poses an enormous disposal challenge, and the toxic chemicals in fracking fluid threaten to leach into our drinking water. [5]

Although health discussions in the United States have focused on drinking water contamination, there is mounting evidence for a range of health threats from air pollution as well. Fracking releases methane, a greenhouse gas [6] which traps 25 times more heat than carbon dioxide. [7] Some of this methane is inadvertently leaked through faulty equipment. The rest is deliberately vented into the atmosphere between extractions. [8]

In addition to methane, fracking releases other toxic compounds into the air such as benzene, hydrogen sulfide, nitrogen oxides, and other hydrocarbons. These nitrogen oxides and volatile

organic compounds (VOCs) react in the presence of sunlight to form ozone, or "smog." [9] A growing body of research shows that exposure to smog can impact health by causing a range of difficulties from general eye, nose, and throat irritation to more severe problems, such as respiratory and cardiovascular effects (shortness of breath, reduced lung function, aggravated and chronic asthma,) and inflammatory processes. Further health impacts can include nervous system damage, birth defects, cancer, and premature death. [10][11][12]

"Maryland remains the first state with natural gas reserves to ban fracking." [13] We do not want to authorize the development of an industry which will risk such major health impacts through its pollution of both our water and our air.

An alternative to the initiation of fracking in Maryland is our proceeding to invest in clean energy. Advances in clean energy make affordable, accessible technologies available to all Marylanders. [14] Projects in clean energy can empower communities, boost economic growth, create jobs, while continuing to protect the environment of Maryland. [15]

Thank you for your consideration of this testimony.

### We respectfully urge an unfavorable report.

Julia Lawrence Columbia, Maryland 21044

Sources and Notes:

#### [1] The Process of Unconventional Natural Gas Production | US EPA

[2] About 20% of ingredients in fracking solution is considered proprietary. Information regarding these ingredients is not revealed to the public, and there are no laws that require companies engaged in hydraulic fracking to release such information regarding these other ingredients used in fracking. Most Notable Hydraulic Fracking Pros and Cons – Vittana.org

[3] <u>Carcinogenicity of benzene, toluene and xylene: epidemiological and experimental evidence -</u> <u>PubMed</u>

[4] <u>A Hot Fracking Mess: How the Lack of Regulation of Oil and Gas Production Leads to Radioactive</u> <u>Waste in Our Water, Air, and Communities</u>

[5] We Banned Fracking in Maryland - Chesapeake Climate Action Network

[6] Research indicates that the U.S. oil and gas industry emits 16.9 million metric tons of methane every year, according to the International Energy Agency, (IEA), Methane Tracker – Data Tools - IEA, March 19, 2024.

[7] The Environmental Protection Agency (EPA) estimates that the U.S. accounts for more methane emissions than 164 countries combined, U.S. to Sharply Cut Methane Pollution that Threatens the Climate and Public Health | US EPA

[8] U.S. to Sharply Cut Methane Pollution that Threatens the Climate and Public Health | US EPA

[9] Volatile Organic Compounds (VOCs): A Brief Regulatory Overview | UL Solutions

[10] <u>US EPA, "Health Effects of Ozone in the General Population,"</u> www.epa.gov/apti/ozonehealth/population.html (accessed June 13, 2014).

[11] <u>NRDC: Air Pollution from Hydraulic Fracturing Threatens Public Health and Communities (PDF)</u> p. 4-5.

[12] John L. Adgate et al. "Potential Public Health Hazards, Exposures and Health Effects from Unconventional Natural Gas Development," Environmental Science and Technology", 2014 doi:10.1021/es404621d

[13] <u>Maryland Remains the First State with Natural Gas Reserves to Ban Fracking</u> | <u>National Caucus of</u> <u>Environmental Legislators</u>

[14] Making Maryland a Leader in Clean Energy and the Greenest State in the Country | MD Priorities

[15] Maryland Clean Energy Center (MCEC)