OIL CONSERVATION COMMISSION CASE NO. 23580: APPLICATION TO PROHIBIT PFAS AND REQUIRE DISCLOSURE OF CHEMICALS USED IN OIL AND GAS DOWNHOLE OPERATIONS

The New Mexico Oil Conservation Commission (OCC) will hold a public hearing November 12th-15th to consider adopting a rule proposed by WildEarth Guardians to prohibit the use of PFAS in oil and gas drilling, development, and production, and further prohibiting the use of any undisclosed chemicals in fracking operations.

In a study published in August 2024 in the Lancet, researchers from the American Cancer Society reported that cancer rates for 17 of the 34 most common cancers are increasing in progressively younger generations. The study notes:

"Trends in cancer incidence in young generations or young adults (less than 50 years) largely reflect increased exposure to carcinogenic factors during early life or young adulthood compared with previous generations..."

One such carcinogenic factor is a class of lab-made chemicals known as perfluoroalkyl and polyfluoroalkyl substances, aka PFAS and PFOA, which are known for their toxicity at extraordinarily low levels, their multiple negative health effects, and their persistence in the environment, leading to their nickname, "forever chemicals."



Between 2013 and 2022 oil and gas companies injected more than 3,600 NM wells with surfactants, a class of chemical that include multiple PFAS. But the details remain a trade secret.

The first PFAS to be sold commercially was created by a chemist at Dupont. Since

1949 it has been used in thousands of products, from nonstick cookware to waterproof clothing to plastics to dental floss. And in 2023 Physicians for Social Responsibility published a report documenting the use of PFAS in the drilling of at least 227 oil and gas wells in New Mexico, and probable cause to suspect thousands more due to the use of "trade secret" undisclosed chemicals.²

PFAS and PFOA manufacturers Dupont and 3M have been aware that at least some of these chemicals were associated with cancers and birth defects and had accumulated in people worldwide since the 1960s. But these facts were kept secret to protect company profits until attorney Rob Bilott filed lawsuits on behalf of affected communities near their manufacturing plants. As part of Dupont's settlement of those lawsuits, epidemiologists completed a study of the blood of 70,000 people and found a probable link between PFOA and kidney cancer, testicular cancer, thyroid disease, high cholesterol, pre-eclampsia and ulcerative colitis.² The Maximum Contaminant Level for PFAS in drinking water set in April 2024 by the Environment Protection Agency (EPA) is just 4 parts per trillion. This reflects the latest science showing that there is no level of exposure to these contaminants without risk of health impacts.

But New Mexicans still don't know if, when, or where the oil and gas industry continues to inject these highly toxic chemicals underground, because the state allows oil and gas chemical manufacturers and well operators to withhold exact fracking and drilling fluid ingredients as "trade secrets." This means that companies do not have to disclose if or when they use PFAS.

NM regulators are operating in the dark with their hands tied, and it is our health and our water at risk! Learn more and sign up for public comment at DefendNMWater.org.

https://psr.org/wp-content/uploads/2023/04/fracking-with-forever-chemicals-in-new-mexico.pdf



 ¹ Differences in cancer rates among adults born between 1920 and 1990 in the USA: an analysis of population-based cancer registry data. Sung, Hyuna et al., The Lancet Public Health, Volume 9, Issue 8, e583 - e593
² Fracking with forever chemicals in New Mexico. Physicians for Social Responsibility, April 2023.

New Mexicans are Uniquely Vulnerable to PFAS and Other Chemicals Used in Oil and Gas Operations

In a 2016 report on fracking and drinking water,³ the Environmental Protection Agency (EPA) found that fracking related pollution from chemicals used in oil and gas operations could follow a number of pathways to impact surface and groundwater. The agency cited the following possible pathways to exposure:

- injection of fracking fluids directly into groundwater, or spills of fracking fluid that seep into groundwater;
- injection of fracking fluid into wells with cracked casing or cement, allowing fluid to migrate into aquifers;
- intersection of fracking fluid with nearby oil and gas wells or underground migration through fractures;
- spills of wastewater after fracking, and inadequate treatment and discharge of fracking waste.

The EPA reported in 2013 that "about 87 percent of New Mexico's public water supply comes from groundwater. No other southwestern state gets such a large percentage of its domestic water from groundwater sources",⁴ and "because groundwater usually moves slowly, contaminants generally undergo less dilution than when in surface water."⁵ As a result, New Mexicans are especially vulnerable to exposure via groundwater contamination.

The use of PFAS by the oil and gas industry also leads to the creation of nondomestic waste containing PFAS, including solid waste, such as drill cuttings, filters, and sludge, and spills of hydraulic fracturing fluids. **Oil and gas industry waste is exempt from hazardous waste regulations under state and federal law, so no one knows how much of these toxic chemicals are being disposed of in "special waste landfills" that accept oil and gas waste across the state. To properly regulate the disposition of this waste, it is imperative the Commission prohibit the use of PFAS in oil and gas industry operations to ensure protection of public health and the environment.**

Why is the Disclosure of Chemicals Used in Fracking Operations also critical?

New Mexican communities across the state have already been severely impacted by PFAS. Residents of La <u>Cieneguilla</u>, <u>Clovis</u>, and near <u>Holloman Airforce Base</u> have been forced to drink bottled water or cease hunting wildlife. A farmer outside Clovis <u>had to euthanize thousands of cattle</u> because they were contaminated by PFAS. But it is not only PFAS we need to worry about. In its 2016 study of fracking and drinking water, the EPA identified 1,606 chemicals used in fracking fluid or found in fracking wastewater. While the agency found high-quality information on health effects for only about 10 percent (173) of these chemicals, the health effects associated with chronic oral exposure to these chemicals include carcinogenicity, neurotoxicity, immune system effects, changes in body weight, changes in blood chemistry, liver and kidney toxicity, and reproductive and developmental toxicity.³ Because oil and gas operators don't have to disclose the chemicals they are using during the fracking process, we do not know if or when our own water supplies and wells are at risk of chemical contamination.

The oil and gas industry claims that divulging its trade secrets will compromise profits and drive business to Texas, but chemical disclosure requirements passed in California and Colorado have not slowed drilling. New Mexicans deserve at least the same protections. Companies can reveal the fracking chemicals injected into each well without the trade names of the products used - the same way food producers disclose individual ingredients while keeping their recipes secret.

In a 2018 water plan released during her gubernatorial campaign, Michelle Lujan Grisham promised that "[as] governor" she would "[r]equire mandatory disclosure of what chemicals are used in hydraulic fracturing to better protect groundwater."⁶ It is time to live up to that promise.

³ U.S. Environmental Protection Agency. Hydraulic fracturing for oil and gas: impacts from the hydraulic fracturing water cycle on drinking water resources in the United States. Washington, DC: Office of Research and Development; 2016, at ES-3, 4-8, 6-39. Accessed Sept. 5, 2022, at https://www.epa.gov/hfstudy ⁴ U.S. Environmental Protection Agency. Saving Water in New Mexico (June 2013). Accessed Dec. 23, 2022, at

https://www.epa.gov/sites/default/files/2017-02/documents/ws-ourwater-new-mexico-statefact-sheet.pdf.

⁵ U.S. Environmental Protection Agency. Getting up to Speed on Ground Water Contamination (August 2015), at C2. Accessed Dec. 23, 2022, at https://www.epa.gov/sites/default/files/2015-08/documents/mgwc-gwc1.pdf.

⁶ https://uttoncenter.unm.edu/resources/state-water-task-force/mlg-water-plan.pdf