

The Need to End Fracking in British Columbia
Risks to Health, Economy, Water and First Nations

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to Hon Harwinder Sandhu MLA

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Fracking and Water

Meeting with MLA Harwinder Sandhu

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Thank you for this opportunity to tell you about my concerns about the fracking industry and our precious resource, water.

Water is not just a resource. Water is life. We cannot exist without it. If we destroy our water by polluting it and using it wastefully, we risk a dark future.

BC Water supply

Water is in short supply this year as BC has declared an unprecedented drought. Two thirds of BC's 34 water basins are at drought level 4 or 5. Residents have been asked to be careful with their personal use of water. But no such restriction is applied to the fracking industry.

How much water?

No limits apply to the volume of water that can be used in fracking process. According to the BC Oil and Gas Commission report, the fracking industry used roughly 5.2 billion litres of water in 2021. Other more honest estimates suggest up to 30 billion litres. The BC government is ready to approve 5 new LNG terminals that will double gas production, increasing the water removal to at least 10.4 billion litres.

Despite the claims from the gas industry that very little water is used, this is not true. Their own report shows that by the end of 2021, 30 oil and gas companies were withdrawing water from 113 locations across the province. The water used is a high percent of the available water in the region the North East region where fracking takes place.

Toxic Hydraulic Fracturing Fluids

The bulk of the fresh water used by the industry is for making hydraulic fracturing fluid. Sand and chemical additives such as benzene, toluene, diesel, biocides and surfactants are added to improve the fracking process. These compounds turn fresh water into unusable undrinkable, radioactive waste, euphemistically called, "Produced Water" or "Flowback Water". Many of the chemicals used are PFAS or "forever" chemicals that are persistent and can never be removed.

Where does the hydraulic fracturing fluid go?

Vertical wells are drilled down to shale beds at great depth. It is almost impossible to case a well with concrete at 4,000 metres. The chance of badly constructed or damaged wells is extremely high in the fracking industry. The gas industry claims they are operating safely but this is not true. New satellites monitoring methane leakage show it is **rare** that wells are properly cased and that methane is not leaking.

Lateral drilling occurs at the bottom of the well. Hydraulic fracking fluid is pumped down the well, subjected to extreme pressure that spreads sideways at the drill site and fractures the sedimentary rock. The high pressure blast needed to fracture the shale has caused earthquakes in many areas. The reason sand is used in the fracturing fluid is to prop the fractured shale layers apart, releasing methane gas. The gas flows back up the well but large quantities of fracking fluids spread out through the rock fissures. Only a small amount of the waste water is recovered.

“Produced Water” or “Flowback water” Disposal

"After the fracking process is complete, the wastewater that returns to the surface is so toxic it cannot be returned to the water cycle without treatment, a process which is currently not used in B.C.,"

This is according to the BC Oil and Gas Commission's own report. Since there is no treatment, the waste is pumped into disposal wells, where it theoretically sits removed from the water cycle. These disposal wells are usually abandoned fracking wells with all the attendant problems of leakage. Wells and open pits have been known to overflow into surrounding areas and spread the contamination. Some of the chemicals are so toxic that small quantities are capable of contaminating millions of litres of water.

Conclusion

There is no way to frack without poisoning huge amounts of water, and **there is no way to clean up or dispose of the wastewater from fracking** without putting communities and the environment at risk. BC is destroying fresh water resources and poisoning communities in a short-sighted attempt to extract carbon rich methane gas from deep underground. The bulk of the gas goes to Alberta to power their failing tar sands industry. This is not only unsustainable it is unconscionable.

We are asking for the BC government to end fracking now.

No new wells .

No new LNG terminals

No new pipelines.

The future is renewable energy.

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