

Dear Yukoners;

If you do one thing this next year it would be to ensure you protect your beautiful land and resources and not allow the extraction of non-conventional resources by way of hydraulic fracturing into your territory and communities.

I say this with conviction because we have lived amidst this process, with wells surrounding our home and it has been devastating for our family. In the past 5 years our peaceful home, awash in fresh air, beautiful views and a secure source of clean water was transformed into an industrial wasteland. Contaminated sites now are our view, diesel fumes, sour gases and unmitigated methane venting has replaced our fresh air and compressor stations and unrelenting traffic shatter our peacefulness. Our water is currently under testing by Alberta Environment because of suspected contamination and we will never feel secure about our water source again. Now our aquifer will always be under the risk of contamination from failed casings, which has already occurred and failed pipelines, which is inevitable. Not to mention the site contamination that is standard with each and every lease, running off into our local watershed, recharging our groundwater with contaminants known to harm human health. Two wells within 300 meters of our home were tested for contamination disclosing BTEX's and hydrocarbons thousands of times higher than regulations permit, yet the majority of the polluted soil was permitted to stay where it was and be dealt with in a "mix, bury, cover" scenario as part of the waste remediation directives the Regulator enforces. Here in Alberta, dilution is still the solution in the oil patch.

Regulations are not sufficient to safeguard your territory in the face of industry. Alberta states with confidence that they have "world-class" regulations, yet I have mountains of files that show each and every well near our home was non-compliant on several levels. Inspections by the Regulatory body showed unsatisfactory performance time and time again with no mitigation. It is not reasonable to assume this Industry can be regulated to the point of it being safe for humans and benign on the environment.

We have well records and investigation reports that demonstrate that in each well, highly toxic drilling fluids, such as diesel invert and carcinogenic, toxic "frac" oil were the mediums used to drill and complete these wells. A number of the components within synthetic frac oil, drilling additives and substances created in the combustion process are listed on Schedule 1-List of Toxic Substances of the Canadian Environmental Protection Act. Much of this toxic material, up to 500 million liters per well, stays in the environment forever. The millions of liters of fluids and waste generated by each well not left "down-hole" are either land-spread, incorporated into the lease, disposed of at landfill or into an injection well. Not only is this waste poisonous, black shale cuttings and drilling waste are known to be radioactive as well. How and why such activity with such harmful outcomes is allowed to occur still baffles me. Furthermore how an entire Industry, its Regulator and all the encompassing lobby groups can misrepresent the facts on these

processes falls nothing short of criminal. We have been outright deceived regarding operations near our home and have non-compliance enforcement letters to prove it.

I am outraged when I see in print that fracture fluid is 99.6% water and the rest is harmless chemicals. The truth here was 100% harmful, cancer causing fracture fluid. It is also ridiculous that it is insisted upon that no groundwater has been polluted in the process or that flaring is 100% conversion efficient, creating no more than water, CO<sub>2</sub> and waste heat from the burning of various waste gases, propane, methanol, nitrogen, and fracture fluids that may contain 30 or more chemicals.

During completions fracture fluid returns with formation gases are incinerated or flared, creating highly irritating, carcinogenic and toxic compounds, impacting our environment and health. 6 wells here have burnt billions upon billions of liters of waste gases, then continue to vent millions more each and every year. And it is only getting worse. Since the low price of gas is no incentive to conserve this product, well tests, flaring and venting are increasing at alarming rates. Increases in emissions are supported by summary reports listed on the Alberta Energy Regulator web-site. If you perceive a problem with climate change now, wait until trillions of liters of methane (Global Warming Potential 86 times that of CO<sub>2</sub> over 20 years), Nitrous Oxide, (GWP 268 times that of CO<sub>2</sub>) CO<sub>2</sub> itself and a long, scary list of other priority air pollutants are being generated and released into your local air-shed.

As a family we have never been more ill, than in the past few years. We have farmed our land organically for 12 years and it was a beautiful oasis until industry moved in and began a sustained campaign to harm us in pursuit of profit. My daughter developed a large tumor in her neck when she was 7, my son suffers from chronic respiratory illness, I have endured debilitating migraines and horrible chronic sinus inflammatory disease. Our animals are chronically sick and many have died. Dizziness, headaches, infections, rashes; if you live near a well that is venting up to 900,000 liters of sour gas a day this may be your new normal. Noise and light pollution will also be your constant companions. If you have metal buildings, they may corrode exponentially with the sulphur dioxide being produced and falling out onto your property. The mental distress, frustration and disheartenment you experience when your livelihood, health and property value is threatened should not go without mention either.

Finally, if the Regulator you create in the Yukon is anything like what we have here in Alberta, good luck to you in garnering assistance if any of these unfortunate circumstances happen to you. In Canada, our water is not protected in any form from industry, there are no health programs in place that even consider the impacts from oil and gas activity and our Regulator in Alberta has treated us like the criminals for reporting a company that was unbelievably negligent in their operations and treatment of us in this ongoing situation. We feel so disappointed with the regulatory structure and culture that we feel we have no recourse but to circumvent their lack of protection and litigate against the company responsible for violating our fundamental rights of personal security and enjoyment of property.

The only way to protect your family and land in the face of oil and gas exploration is to say NO! Insist your government find alternative methods of revenue generation and pursue renewable energy options that are not going to destroy the pristine ecosystem you currently enjoy.

Most Sincerely;

Diana Daunheimer & Family

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