



Yukon Legislative Assembly

Issue 17

33rd Legislature

SELECT COMMITTEE REGARDING THE RISKS AND BENEFITS OF HYDRAULIC FRACTURING

Public Hearings: Evidence

Saturday, September 27, 2014 — 1:00 p.m.

Chair: Patti McLeod

**SELECT COMMITTEE
REGARDING THE RISKS AND BENEFITS OF
HYDRAULIC FRACTURING**

Chair: Patti McLeod
Vice-Chair: Lois Moorcroft

Members: Hon. Currie Dixon
Darius Elias
Sandy Silver
Jim Tredger

Clerk to the Committee: Allison Lloyd

Speakers: Pam Evans
Anna Weiers
Sharon Wisemyn
Sabine Almstrom
Spence Hill
Thomas Parlee
Gerald Brisson
Richard Mueller
Jacqueline Vigneux
Lois Johnston
Ted MacDonald
Judy Douglas
Johanne Lalonde
Sharon Katz
Ione Christensen
Richard Annett
Bernard Walsh
Jill Pangman
Annette Belke
Anne Macaire
Malcolm Mills
Joe Tetlich
Peter Obermueller
Sandy Johnston
Jannik Schou
William Drischler
Doug Mowat
Brian Eaton
Kathy Elliot
Leo Busse
Margaret Nefstead
Angela Code
Dennis Allen
Richard Nerysoo
Rick Halladay
Geri-Lee Buyck

EVIDENCE**Whitehorse, Yukon****Saturday, September 27, 2014 — 1:00 p.m.**

Chair (Ms. McLeod): Good afternoon, everyone. I will now call the hearing to order. This is a hearing of the Yukon Legislative Assembly's Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing.

This public hearing is scheduled for 1:00 p.m. to 4:00 p.m. this afternoon. It is possible that not everybody who wishes to speak today has checked in at the registration desk. I would ask you to do that because it helps us keep things moving and we know who is going to be speaking next. We also remind Yukoners that they may provide their input using e-mail, letter mail or by using the comment form on our website up to September 30.

The individuals who registered to speak at Thursday's hearing, but who did not have an opportunity to present due to time restrictions, have been moved to the beginning of the list for today. I don't know if anybody is here but they haven't checked in at the registration desk, so I would ask them to do that if they are here.

The people who have registered to speak today, but who have already addressed the Committee at previous hearings, have been moved to the end of the list and will be called if there is time remaining.

I'm going to start with introductions of the members of the Committee: I am Patti McLeod, Chair of the Committee and the Member of the Legislative Assembly for Watson Lake.

Hon. Mr. Dixon: Hi, I am Currie Dixon, Minister of Environment, Minister of Economic Development, minister responsible for the Public Service Commission and the MLA for Copperbelt North.

Ms. Moorcroft: Good afternoon, I am Lois Moorcroft. I am the MLA for Copperbelt South and the Vice-Chair of the Committee. I would like to acknowledge that we are on the traditional territory of the Kwanlin Dun First Nation and the Ta'an Kwäch'än Council. Thank you all for coming out this afternoon. I look forward to hearing from you.

Mr. Silver: Hello, I am Sandy Silver. I am the Leader of the Liberal Party and the Member for Klondike. I would also like to thank the Kwanlin Dun for this beautiful facility and for each and every one of you for giving us your Saturday.

Mr. Tredger: Good afternoon, my name is Jim Tredger. I am the MLA for Mayo-Tatchun. I would like to acknowledge that we are on the traditional territory of the Kwanlin Dun and the Ta'an Kwäch'än. I am honoured to be here. I want to thank you all for coming out and making your voices heard on this very important subject as we deliberate the risks and benefits of hydraulic fracturing. I look forward to your input this afternoon. Again, I am honoured to hear from Yukon people. Thank you for coming out.

Mr. Elias: Drin gwiinzii. My name is Darius Elias. I am from Old Crow and I am the MLA for the Vuntut Gwitchin riding in north Yukon. As we come to the

conclusion of these public hearings on the risks and benefits of hydraulic fracturing in the territory, I just want to thank the Yukon public for your diligence and your caring as we go through this process together. I also want to thank my fellow colleagues for taking on this unique and challenging task as well. It is an important reminder that you do have until Tuesday to submit your comments to us. I look forward to hearing from you today. Once again, welcome and thank you.

Chair: Thank you. Also present is Allison Lloyd, the Clerk to the Committee to my left; Helen Fitzsimmons, who is at the back registration table — she is assisting with the paperwork and keeping us running properly; and, of course, our sound recording and transcription staff.

On May 6, 2013, the Yukon Legislative Assembly adopted Motion No. 433, thereby establishing the Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing. The Committee's purpose or mandate is set out in the motion and it includes a number of interconnected responsibilities. The Committee has decided to fulfill its mandate in a three-phase approach.

Firstly, the Committee endeavoured to gain a science-based understanding of the technical, environmental, economic and regulatory aspects of hydraulic fracturing, as well as Yukon's current legislation and regulations relevant to the oil and gas industry.

Secondly, the Committee pursued its mandate to facilitate an informed public dialogue for the purpose of sharing information on the potential risks and benefits of hydraulic fracturing. The Committee invited experts to share their knowledge over four days of proceedings which were open to the public and are now available on our website.

Finally, the third stage of the Committee's work is gathering input from the Yukon public, First Nations, stakeholders and stakeholder groups. This is the purpose of today's hearing, and indeed the other hearings held in various communities across the Yukon.

After these hearings, the Committee will be in a position to report its findings and recommendations to the Legislative Assembly. A summary of the Committee's activities to date is available at the registration table. All the information the Committee has collected, including presentations from experts on various aspects of hydraulic fracturing, is available on the Committee's website.

The Committee will not be presenting information on the risks and benefits of hydraulic fracturing, as this hearing is the time allotted for and will be devoted to hearing from as many Yukoners as possible. Individual presentations to the Committee will be limited to five minutes. If there is time remaining at the end of the presentations, presenters may be invited to speak longer.

If you would like to present your opinion to the Committee, please ensure that you have signed in at the registration desk and please note that this hearing is being recorded and transcribed. Everything you say will be on the public record and posted on the Committee's website.

I would like to welcome everyone in the audience today and ask that you please respect the rules for this hearing. Visitors are not allowed to disrupt or interfere in the proceedings. Please refrain from making noise, including comments and applause, and mute any electronic devices. Those presenters who have speaking notes are asked to provide the transcription staff with a copy of those notes to facilitate accurate and good reporting of your words.

With that, we are going to get started. First of all, is there anyone here who has not registered at the desk who was registered to speak on Thursday?

Okay, we are going to start with Pam Evans. We will follow that up with Anna Weiers.

Ms. Evans: Good afternoon to everybody. I am glad you are here to listen to us. I hope you hear our words this afternoon and that this is not just an exercise in futility for us, but we're really being heard.

This week, Dr. David Suzuki, who does *The Nature of Things* on TV, announced he would be doing an east-to-west Canadian tour, ending in Vancouver, promoting clean air and clean water as a constitutional right for Canadians. I agree with this.

I came to the Yukon 45 years ago this month. The first thing I noticed was the clean air, the Yukon River running through the town and the miles and miles of trees, lakes and rivers surrounding Whitehorse. I have always loved that I can go out my front door and have a manicured lawn, paved drive and streetlights, but out the back door can be wilderness for miles and miles.

The Yukon's clean air, clean water and all of the outdoor activities draw many people here. Clean air to breathe, clean water you can swim in, fish in, boat in — and you can eat the fish you catch — miles of beautiful lakes, rivers, streams, campgrounds and trails surround us — the beauty of the trees when they change colour and picking berries to freeze for the winter — being able to hike into the wilderness, do photography, hunt and be able to eat food hunted. I heard on the radio this week that there are twice as many moose in the Yukon as there are people. That is more than 60,000 moose.

People come to live here for this life — a combination of civilization and wilderness. You can be totally alone at a lake or a river about five minutes from town, at Schwatka Lake or at Ear Lake. It's great. This is precious and it has to be protected. This is what the tourists come to see.

We need to protect our environment and the health of our people and our visitors. I have worked in Whitehorse and out in some of the communities over the years and I've heard First Nation elders talk about protecting seven generations in the future. We need to think like this about the environment we will leave for future generations. They deserve clean air, clean water, clean land, healthy wildlife and vegetation. We owe them that.

Fracking practices carry too much cost with them to be allowed in the Yukon now or in the future. Fracking uses huge amounts of water that are polluted with chemicals. This polluted water is left behind either in ponds or forced back

underground where it can pollute the land potentially get into the groundwater. The cost is just too high. We need to get our priorities straight and start protecting what we have here: our air, our water, our land, our wildlife, our vegetation and our people.

I believe that in the future clean water will become more precious, as rivers, streams and lakes elsewhere are polluted and unusable. We need to protect our water and our other resources as precious assets going into our future. No fracking in the Yukon — not now and not in the future.

Instead, look at sustainable development like wilderness lodges, spas and so on, with solar panels, compostable toilets and log construction. Tourists would pay a lot of money to fly into a beautiful spa, for example, with yoga, meditation, massage on the shore of some beautiful Yukon lake or river — feed them fresh Yukon fish, fresh Yukon berries, fresh organic produce grown on-site, have canoes, hiking, photography — so this is just one example of what is possible.

Start a big research program to plan proactively for climate change instead of reacting as it occurs. Promote organic farming, grass-fed beef and free-range chickens and so on. Research sustainable alternatives to fossil fuels — solar panels and so on — that don't harm the environment and the people — and no fracking in the Yukon, now or in the future. Thank you.

Chair: Thank you.

Anna Weiers, please, followed by Sharon Wisemyn.

Ms. Weiers: Madam Chair, panel and fellow citizens, I have attended YESAB meetings, government-industry smoke-and-mirror presentations and I've submitted my pleas. I'm sick of begging. There is a pattern here.

I was a part of the Cariboo-Chilcotin Land Use Plan in the early '90s. I saw the awesome power of the multinationals. I saw how they live on lies, spin, intimidation, bribery and propaganda. They direct and spend our passionate energy until we burn out. It works.

Division, another effective strategy — divide, divide, divide and conquer. Even my family, who was in the logging and sawmill business, was divided. I saw that there are those who think of this world as a sacred place to live, those who think of this planet as one big commodity, and those just trying to make a damn mortgage payment.

After three years of hard negotiations, government did what Pasloski and Harper are doing. They divided us; they burnt us out; they changed laws to accommodate big industry. There is a pattern here.

Governments that run oil money just answer to oil. Governments that run on tax dollars must represent taxpayers. Oil money strengthens autocracies and weakens democracy. Our Prime Minister has used oil revenue to construct a petro-state with a taste for defence spending, electoral fraud, science-bashing and prison-building — all very violent.

The one-percent GDP we gain from oil revenue is not worth the massive amount of groundwater poisoned and land ruined. Pasloski is neutering YESAB, scrapping the Peel plan and building an LNG facility amid schools, hospitals and

residential area, with no regard for safety or the negative effect on property value. We need to take back our country or be ruled by Chinese oil giants. We need a swift revolution in the north. We need our democracy back. We need to give up hope and get into action.

I read a quote on my calendar as I was writing this. It's an old activist named Frances Moore Lappé born in 1944, who said: "Hope is not what we find in evidence, it's what we become in action." We need to be the change we want to see. We need to march shoulder to shoulder. We have abolished slavery and residential schools and replaced them with a different kind of slavery. Although not yet equal, women, aboriginals and animals have more rights. It's time to outlaw this insane violent practice of fracking.

To those who quietly support us, to those who march in the streets, to those who write letters, to Yukoners concerned, to CPAWS, to Yukon Conservation Society: I salute you and I thank you for carrying the flame. To big oil: over my dead body will you ruin my beloved north. Günilschish.

Chair: Thank you.

Sharon Wisemyn, please, followed by Sabine Almstrom.

Ms. Wisemyn: Hello. For myself, I always feel that a whole person has to deal with both their head, their heart and their guts. I know that there is lots of head stuff that you have heard — lots of reports on both sides. I grew up when the tobacco industry was telling people that smoking was good for you and then denied for years and years that it caused cancer. So I am well aware of what science that is bought out by industry can do. I am also aware that there is wonderful evidence by committed scientists who haven't yet been muzzled. I am aware that a Columbia University professor headed a study of the reports of 78,000 wells and found that they all leak. The question is: to what extent and what are they leaking? Technology has only gone so far.

I remember when I drove in 2011 on the Alaska Highway by Fort St. John. I must say I had a gut response to the signs that said, "Danger: poisoned gas. Do not stop" I wondered, what would it be like if I was driving along the Alaska Highway, the 25 minutes from Whitehorse to my house? I thought, what would that be like to see signs that said, "Danger: do not stop. Poisoned gas, hydrogen sulphide?" I thought where would I go to pick berries or go for a hike? Where would I feel safe? I would see trucks everywhere — large trucks — because if we become Fort St. John north, there could be 30,000 oil wells — as many as there are people — around here. There would be roads everywhere with industrial trucks going. That would be my drive home.

Then if I wanted to canoe along the Takhini River where I live, I would be worried. Would they put signs up there — "Danger" — where the hydrogen sulphide gas is? It does go to the lowest area. Or maybe I would just paddle faster as I went through this. Now I am not saying that this would happen here, but it has happened in Fort St. John.

I go to my heart. Where is my heart with this? I heard the people from the First Nations around Fort St. John and Fort Nelson talk about their sorrow — the sorrow of their elders

who could not go to their cabins for fear of drinking the water, the sorrow as they saw what was happening as industrial sites replace trails. I cried during that. I went home and I cried some more.

Then I thought, let's get to what is going on in my gut. Of course, that becomes frustration and it becomes anger. I know that gut is at the core of a lot of this, because that's greed — greed of the corporations — and I think that can be accepted because we can see what happens.

I remember reading about the head of one of the largest gold mines in the world who had hired contractors — or his company had hired contractors — to murder the local miners in a third world country where they wanted the land. When someone confronted him — it was an investigative reporter — and said, "How can you do this?" and he said, "I'm a billionaire and they are not." So this is where guts can get you, but my anger can get me somewhere.

I think it can get me to the point where I say I have some rights too. I have a right to clean air and clean water. I have a right to enjoy the beauties of nature. I affirm the right of First Nations to protect this land. I affirm the right of nature to exist without being polluted and without being ruined. I assert the right of nature to have diversity and to have other creatures aside from human beings that are here. Therefore, I do not assert the right of this government to let this country — ah, one minute remaining. Then I will just say, I do not assert the right — (inaudible).

Chair: Your words are not being recorded, ma'am. Thank you very much of your time.

Sabine Almstrom, please, followed by Spence Hill.

I am going to have to ask you to stay close to the mic stand because the sound quality for our recording staff is a problem.

Ms. Almstrom: Okay. My name is Sabine Almstrom. I have come to say no to fracking in the Yukon and yes to preserving our most precious resource: clean Yukon water in our precious and superb Yukon environment.

I will not reiterate the risks of fracking. The word "risk", as in select committee for the risks and benefits of fracking, in itself, seeks to give fracking a neutral flavour and implies just potential hazards, although the very real damage and poisoning that fracking does to the environment and our health has been experienced and documented over and over and over again.

Let's call a spade a spade and be quite clear: there is no way the government politicians are not aware of the damages caused by fracking and the dangers of fracking to the health of the people and to nature. They are also aware that, once unleashed, we will have to live forever with the destruction that fracking causes. The developer only has to win once, as everyone knows.

So that leads to the question: do they — the politicians and the government — care, since they know all this? Judging from the government's hell-bent approach on actively procuring the business of the extraction industry and on

selling out anything that can be dug up or pumped up, the obvious answer seems to be no, they do not care.

The government politicians are also well-aware of the benefits: more money in the pockets of already rich outside oil and gas companies that receive tax breaks, subsidies and pay mere pennies in royalties once — should they hit pay dirt, so to speak — another benefit is the support of a grateful industry to their political campaigns; rubbing shoulders with the high and mighty captains of industry in the so-called halls of power; and a few jobs for Yukoners — the same tired old argument used by conservatives the world over to justify environmental destruction that is forever — I may add, that while badly needed affordable housing for low-income Yukoners remains on the backburner, as an aside.

There is no need to extract natural gas in the Yukon. The real risk-benefit analysis weighs heavily and unmistakably in favour of preserving this magnificent place in its natural state, in favour of preserving nature's services that in turn are the fundamental basis for our own health and well-being. We cannot live without them.

Nations all over the world have banned fracking and not out of the goodness of their hearts, but because the dangers and damages far outweigh any potential benefits. I urge the government to follow their lead and ban fracking in the Yukon. Don't introduce technology here that continues to be banned around the globe. Use our \$1-billion-plus budget wisely to spur the development of alternative energies. There is immense creative power in the Yukon to develop renewable resources. Support this power.

I invite the government to change from their isolationist policy of consorting only with like-minded cohorts to an open, honest dialogue with the majority of the Yukon people that, incidentally, they also represent — the people who are overwhelmingly sending them the same clear and loud message: no fracking in the Yukon. The people don't want it and the people won't allow it.

Chair: Spence Hill, please, followed by Thomas Parlee.

Ms. Hill: Good afternoon, my name is Spence Hill. I would like to introduce our daughter Nancy, our son-in-law Jarryde, and our recently arrived grandson Hunter Glenn Heinbigner. I introduce them because they represent the future of our planet and it is the future of our plant that is at stake when we discuss fracking. For the sake of our planet, I oppose fracking.

When I grew up in southern Ontario, I swam and boated on the lakes and rivers of the Canadian Shield. When I was thirsty, I leaned over the side of the canoe, scooped up a handful of water and drank cold, clean water.

Fast-forward 30 years and I was canoeing with my young family — Nancy — on Alberta rivers downstream from pulp and paper plants. At the beginning of each canoe trip, I would remind Nancy and the others: "Only drink from the blue water jug, kids — the water we brought from the city. The water in the river isn't safe to drink." That caution broke my heart because polluted water was now the new normal. That was

what the next generation had to accept. Polluted water was the way the world was.

Now fast-forward another 20 years and my grandson may grow up in a relatively clean Yukon or he may learn another new normal of a backyard without water because so much of it has been used for hydraulic fracking. If we allow fracking there won't be water left in the water table and what little water is left will be so polluted that Hunter's parents won't let him canoe on it, much less swim in it. His experience would perhaps be like the Chinese homestay students that we have hosted who have told us they have never swum in a lake or river because they are too polluted in their country. That's not what we want here.

In 50 years — my lifetime in this country — water has become so severely degraded by industry development, increasing population — but mostly by mismanagement, lack of regulation, lack of enforcement. Fifty years is a blink of any on the time scale of this planet, and yet, in so short a time, we have wrought so much damage. We've demonstrated that we cannot regulate development so that it will not damage our world. Why do we think we will be able to regulate fracking?

If we allow fracking in this territory, if we allow ourselves to use electricity produced from LNG that has been fracked, we are guilty — guilty of knowingly destroying this sacred planet, guilty of not providing the necessities of life for our children and our children's children, guilty of putting greed and material consumption ahead of moral responsibility. We must reject fracking and the industry it supports. We must turn to renewable, sustainable energies. We have the opportunity to be leaders in alternate energies. We should grasp this opportunity and take a stance which will make little Hunter proud to be a Canadian from the Yukon, a place where decisions honour the land, the water and the future generations.

I expect nothing less than visionary leadership from my government on this issue. Ban fracking and become leaders in alternate energy, for Hunter's sake and all the others of his generation. Thank you.

Chair: Thank you.

Thomas Parlee, please, with Jacqueline Vigneux following.

Mr. Parlee: Good afternoon, Honourable Members of the Legislature.

I've been sitting on the sidelines, listening to the information of the fundamentals of natural gas exploration using the method of hydraulic fracturing to extract methane and natural gas from shale rock. I am astounded at the magnitude of the operations. I am most concerned about the use of water, roughly three million litres of water per wellhead, thousands of undisclosed chemicals and thousands of tonnes of sand in just one well.

I've heard that over the next 10 to 20 years, 50,000 more wells are going to be drilled in northern British Columbia. Now multiplying these quantities of 50,000 wells in the Yukon — that's conservatively speaking — 150 million litres of water used in the fracking process. That's the equivalent of

400,000 Olympic-sized swimming pools of fresh water. Where does that water come from? It comes from our lakes and rivers. The cocktail of water, chemicals and sand is injected into the well under high pressure, fracturing the rock and then it is pumped out. Unfortunately, only 25 to 50 percent of that water is recovered to sit in holding ponds for I don't know how long. The average life of a producing well is six years. What happens then? What happens to the water that has been sitting in holding ponds?

In this northern environment, there is a scar on the land for 100 years. I've recently flown over northern British Columbia on the way to Edmonton and witnessed the degradation of the landscape at the hands of oil and gas companies. There are well pads every 400 metres along winding gravel roads in all directions in the Fort Nelson area. It looks like a series of checkerboards for hundreds of kilometres.

Who pays for the roads that are needed to be built to get trucks and equipment to exploration fields? Our Government of Yukon pays for that and we pay the government.

What about jobs? The word is always "jobs." The answer is jobs are short-term for a few years. Once the gas is extracted, the jobs are gone. Are these our rewards? Is this what we want in our territory? My answer is no to fracking. Thank you.

Chair: Thank you.

Jacqueline Vigneux, please, followed by Gerald Brisson. Is Jacqueline here?

Gerald Brisson, please, followed by Richard Mueller.

Mr. Brisson: Good afternoon. My name is Gerald Brisson.

Just because we can do something, doesn't mean that we should. Are we willing to accept the risks of a fossil fuel techno solution which is an obvious act of desperation from a dying industry, just like the dinosaurs that are reported to have helped in the desperation from a dying industry to make those fossil fuels? The oil and gas industry has become the same metaphoric dinosaur that is getting very close to its own extinction.

This is becoming increasingly obvious, not only with the environmentally catastrophic disaster called hydraulic fracturing, but it is evident when we see examples like the oil dynasty family the Rockefellers recently announcing that they are getting out of the oil and gas business completely because they see the writing is on the wall.

This is about a lot more than the typical prognosticated pitches about an increase in jobs, money and energy security which doesn't exist with hydraulic fracturing. This is about the very health of the world we all live in and thus, ourselves. Are we all okay with releasing toxic radioactive gases that are sitting in their natural deposits and releasing them into our daily environment?

The process of hydraulic fracturing, besides pumping down numerous toxic chemicals into the Earth, releases deadly radioactive gases, including uranium-238, which creates its daughter gas, radium-226. Radium-226 has another

daughter gas of its own, which is known as radon-222. This is highly toxic and radioactive. It's the second-leading cause of lung cancer in the United States right now. It would be highly suggested, actually, to take a consensus — a statistical analysis — to see how many people have lung cancer in the Yukon right now and then do it in five years if hydraulic fracturing should actually occur.

Is a high incidence of lung cancer an acceptable risk for temporary jobs and temporary money? Is that an acceptable risk? Is it not also slightly suspect the coincidence that in Whitehorse, there have been, through mandated bylaw, radon gas sub-slab reduction systems being installed in most, if not all, new houses? Is that just a coincidence? Is this simply in preparation for the inevitable fracking industry to make its full integration into the Yukon?

The hydraulic fracking industry might say that radon gas is an acceptable risk. Is it an acceptable risk to have levels of radon in streams and rivers that are thousands of times higher than even the Environmental Protection Agency's safe limits? Let's be clear. This is a radioactive gas which means it's formed from the isotopes of the element releasing energy, from the disintegration of its atomic nuclei. The industry might say that radon gas is not a big deal because its half-life is only 3.8 days. What they won't tell you is that the life of uranium-238 is billions of years and through its daughter gas, radium-226, radon gas will continue to be produced for billions of years as well.

If the Earth wanted these radioactive gases to be released, then it would be done through natural means, which is how it happens through earthquakes. But now we have unnatural frack-quakes being created in many different places around the world right now and the payment for this unnatural destruction is going to be a lot more ferocious than giving back some monetary legal tender notes which mean absolutely nothing to nature. Let me make that statement clear: money and jobs mean nothing to nature. Nature will win every time. It's up to us to decide how that win comes about.

Humanity might talk big and use that word "love," especially in regard to saying how much we love our children, but I seriously question that when looking at the world around us and the catastrophic state in which this beautiful Earth is being turned into — a devastated wasteland, where the Yukon is simply going to be another checkmark on the corporate list of places taken over and destroyed.

The fracking industry is just another corporation that cares not for the effects of its actions upon anyone or anything and it seems that they now speak for the world of mankind. The word "corporation" comes from the Latin *corpus*, meaning "body." When we look at the word "corporation", its suffix, "oration" means "to speak." Therefore, the very meaning of a corporation is "a speaking body" or "body politic." That's also shown by the term "corporeal" meaning "to have a body but no spirit." Only the spirit has the capacity to care about the effects of its action. A corporation does not have that ability. It's a corpse-oration, a dead entity speaking, which is why everything it touches dies.

Chair: Thank you very much.

Mr. Brisson: This is a fact and we are all going to quickly find out how much spirit this place has or does not have. Thank you.

Chair: Richard Mueller, please, followed by Jacqueline Vigneux.

Mr. Mueller: Good afternoon to everyone. Thanks for having these meetings, not just in the affected communities of Liard and Old Crow, et cetera, and thanks for bringing these meetings also to other communities, i.e. Carcross and Whitehorse, et cetera.

My name is Richard Mueller. I've lived at Marsh Lake for almost 30 years and for all those years, I've just gone down to the lake with my bucket, in ice-free times, and drank the water — untreated, unboiled and I'm looking pretty healthy. I would like to say that people have been doing this for thousands of years in this country — all over the world, actually, until we started pooping in it and whatnot — or fracking into it.

My point being, I would like all of us and all the animals, to be able to drink the water all the time and into the future, whether we frack or not. If we can find a way of fracking without screwing up the water quality, okay, we might be able to look at it. But so far, we don't have that.

That brings me to my second point. Hydraulic fracturing — the effects of it cannot be regulated because we don't know — we don't really know what goes on underground. To put immense pressure under there and you frack, sure, something that has been stable for hundreds of thousands of years, you're going to create pressures and vacuums and things are going to shift and we, from up here — even with radar and whatnot — we cannot tell what's actually going to happen underneath there, so there's going to be shifts underground and we do not know the effects of it. I'm sure there are all kinds of scientific evidence for and against that. I don't want to get into that too much, but it just makes common sense that when you fracture something that's solid — fairly solid; everything moves around anyways — it's going to move and it's going to affect the water we drink now and future generations of humans also will drink. I don't just want to talk for humans and water quality — there are lots of other beings on this planet that also need water. Almost actually 99 percent of all beings on this planet need water — there are few that don't need oxygen or something; that's cool.

But we are stewards. It comes down to a choice. We know that the oil and gas industry has an immense impact on the environment. We know we use that — the oil and gas stuff. I just drove my car here so I know that. But the choice is really — in the Yukon at least — to enter into an ecologically destructive industry which doesn't really exist yet except maybe up in the Eagle Plains where we're starting on it — we can go into that and pursue that madness that's happening all over the rest of the world or we can come back and say, hey, what do we want the Yukon really to look like? What kind of Yukon do we want because it's still — it's almost a virgin, okay? We can still decide whether or not to do it, okay.

We have a choice here and that's what you guys are about — to listen to us — and I recommend to you folks not to allow fracking in the Yukon. I'd like to go one point farther to the government members here on the panel and over there in the next building over there — I actually command that you not allow fracking in the Yukon because it's my land and it's the land of the people after me and all the creatures that we share this place with, so I demand that you disallow fracking in the Yukon.

As far as I can tell, this government is not interested in my opinion, but if the government is going to frack, okay, good, then I would like to take my position as a 1/35,000th member of this community here and I would like you to leave 1/35,000th of each fracking well free and pristine, because it's mine and I'm not giving them the permission to frack it.

It's about water. It's about justice. It's about choice. What kind of a world do we want to live in? I want to live in a world that's full of personal responsibility. I'd like to use an electric car or work from home and we should all look at how are we living? How are we impacting this planet? Can we really demand what we're demanding without looking at our own actions? Thank you very much. Have a good day.

Chair: Thank you.

Jacqueline Vigneux, please, followed by Lois Johnston.

Ms. Vigneux: Good day. As I'm talking for a group and I'm French-speaking, I would ask if I could go a little — I'm not sure I'm going to read this text within five minutes, so I would ask the Committee, please, if I can go until the end of my text which I did in English.

Chair: No, I'm sorry. You have five minutes.

Ms. Vigneux: I would also ask, since fracking has the potential to affect the health, we think — Frack-free Yukon Alliance — that the comments presented in French should fall within the six areas where the government is required to provide translation, so that those comments can be properly taken into account in your review.

Frack-free Yukon Alliance has participated in consultation processes given by your Committee. Our position stands out by not endorsing the experts that your Committee decided to invite and hear. How is this Committee going to recommend not to frack if you did not invite experts that know and have the proof that fracking, stimulating, experiencing is harmful, invasive, and impossible to regulate? Your photo gallery is a real joke and does not reflect the reality. Your Committee was invited by the oil industry to witness a frack job that looked like nothing to compare to the 19,000 that were permitted in one county alone in the U.S. and then 1,000 a month after that. The same is planned for the Horn Basin and Liard Basin.

Yukon government is started to build them roads that oil and gas will destroy at our own cost. We do not endorse the calculated seducer language of mixed messages that your experts presented. Almost without exception, these experts advised, "go slow with fracking and regulate it."

Worse, some even recommended the Alberta model where citizens harmed by the oil and gas industry are

regulated, not companies that break the law. The Alberta court recently gave legal immunity to a regulator in the province, breaking the *Charter of Rights and Freedoms*. If this is not reversed by Canada's Supreme Court, this will create a jurisprudence that can muzzle all Canadians harmed by oil and gas operations. Do you realize that? Thanks to Jessica Ernst, who is holding that fight, and that this Committee did not want to invite up here to share her expertise with them and Yukon's public. She wrote a 93-page catalogue on North America's contamination case.

We will continue to hold false experts to account for their undisclosed conflict of interest. We don't support presenters, including, but not limited to, Mark Jaccard, who wrote the book *Sustainable Fossil Fuels*, proposing LNG and fracking as an energy bridge to the future, who promotes carbon capture on behalf of Royal Dutch Shell and has worked on petro state assignments for Stephen Harper.

We don't support presenters such as doctors who have violated their mandate to protect public health and safety by advising regulated fracking and the go-slow approach or toxicologists who have never seen a case of contamination.

We don't support presenters such as Professors Chalaturnyk and Mayer whose advice for regulated fracking were heard, not once, but twice, by this select committee.

We neither support presenters such as Gilles Wendling, hydrologist, with his pro-frack advisory to the Fort Nelson First Nation, which had a disastrous known effect, which he did not publicly disclose to the select committee and the Yukon public, who is saying that there are no studies about water contamination and is now making friends and giving advice to Yukoners just as he did in B.C.

Frack-free Yukon Alliance does not give the arguments to the government they need to go ahead with regulated fracking. We have on record our Premier saying that methane comes from cows. We know it, but we also know that fracking in permafrost and anywhere will release green gas emissions that the reality of climate change cannot support. It is high time to start to turn our back on fossil fuel as the giant Rockefeller did himself this week.

Frack-free Yukon Alliance invited last night two knowledgeable lawyers to help us to put our energy where it counts —

Chair: Thank you very much.

Ms. Vigneux: — to strengthen community and establish rights of nature.

Chair: Thank you. If you would like to present the rest of your text to the table as a submission, we'll accept that. Thank you.

Lois Johnston, please, followed by Ted MacDonald.

Ms. Johnston: Thank you for this opportunity to speak here today.

Earlier this year, the Council of Canadian Academies released their report entitled *Environmental Impacts of Shale Gas Extraction in Canada*. This lengthy report was commissioned by the Canadian federal government through the Department of Environment.

Throughout this report, the panel identified many areas of incomplete scientific knowledge and understanding of the environmental effects of shale gas development. The panel cautioned that there has been no comprehensive investment in research and monitoring of environmental and health impacts. It also states that consideration the impacts of shale gas on groundwater must be framed in the context of decades or even centuries and we must anticipate potential effects that are not currently observed because evidence is not being sought.

The panel also states that claims there are no proven adverse effects on groundwater from shale gas development lack credibility for the obvious reason that absence of evidence is not evidence of absence.

Because of the lack of research and the lack of baseline data and the high potential of water contamination, combined with the negative impacts on our ecosystems, fracking should not be allowed or even considered in the Yukon.

With regard to economic benefits, the academy looked at the European Environment Agency study — a 2013 study entitled, *Late lessons from early warnings*, which highlighted — and I quote: “numerous examples in which evidence of adverse environmental impacts from economic activity was discounted based on justifications that seemed logical at the time but turned out to be incomplete at best.”

The academy report states that these examples include factors that are relevant here in Canada, such as the tendency of advocates for new technologies and economic activity to assert that a lack of proof of harm is equivalent to a proof of safety.

There are many unanswered questions about the environmental, health and global warming impacts of shale gas development. In my opinion, we do not need to do the fracking experiment here and we cannot afford to do it here, given our moral obligation to future generations to address the greater issue facing us. That is the issue of climate change and the urgent need to move away from fossil fuels to renewable energy. Thank you.

Chair: Thank you.

Ted MacDonald, followed by Judy Douglas, please.

Mr. MacDonald: Thank you. First, I would like to acknowledge the Kwanlin Dun and Ta'an Kwäch'an First Nations and thank them for giving me the opportunity to speak on their land here. I would also like to thank the members of the Select Committee for giving up their evenings and weekends over the past months to hear the opinions of Yukoners on this important subject.

I have come to the conclusion — and I say here for the public record — that fracking should not be employed in the Yukon. There are many reasons I think this way but the most universal is that it does not make money. This monologue will present an economic argument against allowing hydraulic fracturing, or fracking, in the Yukon. I'll be referencing and submitting a few articles that support my thesis to this Committee.

The B.C. model: The Yukon has signed a regulatory learning agreement with B.C. on hydraulic fracturing. B.C.

has graciously agreed to share the lessons they have learned when regulating the oil and gas industry with the Yukon.

Let's examine B.C.'s model to see what we can learn about the economics of fracking. According to Norman Farrell, writing in the on-line website, *The Commonsense Canadian*, the gas industry contributes just 0.1 percent of B.C.'s revenues and few jobs. Referencing statistics produced by the B.C. government, Farrell details how the natural gas industry accounts for just one-tenth of one percent of the B.C. government revenue and that only about 3,000 people are directly employed in oil and gas extraction. To stress how few jobs this represents, he shows how education and manufacturing each provide more than 50 times as many jobs; retailing, almost as many as 100 times. Should we really be following B.C.'s lead on this?

With natural gas prices falling because of the rush to develop, creating an oversupply to world markets, it makes sense to wait to exploit our natural gas inheritance. The gas isn't going anywhere.

According to *Bloomberg News*, capacity from proposed North American LNG terminals is more than triple the forecast growth in Asian gas demand by 2020. From their own government website, the B.C. government set a goal of having three LNG facilities in operation by 2020. How will this plan succeed? The obvious answer to me is that it will not.

There are alternatives, and I will speak to one. If you want to create well-paid jobs, look no further than renewable energy. Using existing programs offered by the Yukon Department of Energy, Mines and Resources, the good energy rebate program and the micro-generation program, we can reduce the need to burn fossil fuels in the territory. By amending the good energy rebate program eligibility criteria to include wind turbine and photovoltaic solar energy-producing technologies, we can incentivize the creation of new local businesses specializing in these residential and small-scale commercial technologies.

One technology to consider is Helix Wind turbines. They move with very little wind and do not have to move to face the changing direction of the wind. They are ideal to put on buildings because they can be small and only rotate on a vertical axis. Technology is advancing, and today there are wind-generation technologies available on small scales that can run on 16-kilometre-an-hour wind speeds. The company, Helix Wind, out of Nevada, U.S.A., is one company that has developed a cutting-edge technology that has proven to work in such low wind conditions. Wind speed has been increasing in the Yukon over the past 50 years according to a scientific paper written by JP Pinard and published in the journal *Arctic* in 2007. I have references here.

With wind speeds increasing and wind technologies improving, it makes sense to invest in wind power. In the future, petrochemicals will be worth much more than they are today due to the fact that they are a finite resource. Leaving these petroleum products in the ground now is akin to letting money in the bank earn interest.

Now I leave you with one final thought, a worrying idea. Prime Minister Stephen Harper has just ratified the Canadian-China foreign investment and protection agreement, FIPPA, which, among other provisions, would allow Chinese state-owned corporations to sue Canadian jurisdictions if environmental or other laws are interfering with planned profits. All the information on this agreement can be found in this open letter to the Prime Minister, written by Gus Van Harten, associate professor, Osgoode Hall Law School, in October 2012.

What happens if we allow fracking in the Eagle Plains Northern Cross operations? We will never be able to stop them using it. If the Yukon passes a law to ban fracking after it has been allowed, hypothetically, and the Chinese-owned Northern Cross company had planned profits to use fracking in their wells, then the Chinese company can sue our territorial government in a court outside Canada that has no appeal process. Does this sound like a future that you want?

Chair: Thank you very much. If you would wish to provide us with the text copy, we would be happy to accept that. Thank you.

Judy Douglas, please, followed by Johanne Lalonde.

Ms. Douglas: Bless you, members of the select committee, and bless you, fellow Yukoners.

Fracking uses 25 million litres of water per gas well. This water is then tainted for future use. Six hundred chemicals are added to every gas well. Water is precious, and I looked up that word "precious" in the dictionary and it means "of great value". Water is a necessity — essential, indispensable, life-saving. We use water for recreation, plants and gardens, washing dishes, cleaning, cooking, bathing, drinking. It sustains our animals and our ecosystem.

I am going to give you a little foundation of how precious water was in the beginning of time. In the Bible, in the Old Testament, the herdsmen and servants stole wells for their masters. Wells were so important that they were given names. The herdsmen fought over wells. Water was a sign of fruitfulness in the land. The Philistines stopped up the wells of water that Abraham's servants dug because they wanted to hinder their progress. I believe that fracking is our enemy and they will try to stop our wells of water.

We have been careless and taken our water for granted. God has made us stewards of the land to protect it. Whatever you value, you will protect. Things that are precious in our life — gold, diamonds, furs, antiques — we protect and handle with special care. With fracking, there are methane leaks, which accelerate climate change and disturb weather patterns. It will disturb our ecosystem and our animals and our fish, and perhaps kill them and even us. Furthermore, the injecting of water, chemicals and sand at high pressure into the Earth will tamper with our natural foundations and create a more volatile and destructive environment, causing earthquakes, tornadoes, hurricanes and volcanoes.

A friend of mine said that they read in the *National Geographic* about the fracking they are doing in North Dakota, and he literally saw a picture of somebody's water

tap, and coming out of the water tap was fire — fire — and it was caused by all the chemicals.

In Third World countries, there is so much diseased water that people don't even know if they are going to live after having a cup of water, and I don't want the Yukon to turn out to be like that. We need to be good stewards of our water. Yukoners, you are a hardy bunch. Anybody who can withstand 40 below — you are tough. I would encourage you and ask you to stand up and protect and fight for our water and our land. I want to thank you today for hearing my heart.

Chair: Thank you.

Johanne Lalone, please, followed by Sharon Katz.

Ms. Lalonde: I haven't attended all of the community organized meeting about fracking — but those I have attended, I have noticed the absence of any representatives from our leading government right now, the majority party. It makes me wonder if they are supposedly representative of the people who vote in this country — in this territory. Why are they not attending meetings where they could be made aware of the concerns and the reasons for the concerns of their constituents? Yet, at the same time, they regularly not only attend but organize forums with the oil and gas industry. I am questioning the process of representation and I am finding that I have lost hope in the capacity and willingness of the so-called elected representatives to defend my interests, and I think they are actually defending and promoting the interest of mega corporations.

I would think that maybe now we have to find a new way of taking back democracy into our hands so that our basic rights are protected and the rights of wilderness, as such. That's about as much as I can say.

Chair: Thank you.

Sharon Katz, please, followed by Ione Christensen.

Ms. Katz: Good afternoon. Thank you for giving us the opportunity to talk. I am going to talk about radiation again because radiation is often concomitant to oil and gas development because of a way those oil and gas reservoirs are formed at the bottom of ancient seas — in the brine of those seas — as they dry, the brine also concentrates a lot of radioactive material. The levels of radioactivity in fracking fluid, or the fluids that are sent to do the fracturing and come back — the levels of radioactivity are often so high that they would require disposal as radioactive waste, but in certain jurisdictions, they fall in the cracks because the regulation for this radioactive waste was developed for nuclear energy, so it's not properly disposed of. That's one problem.

The other point is that if this radioactive waste is properly disposed of, that is very costly, and then the development of the fracking is no longer economical. It becomes more expensive than alternative forms of getting energy. So there's also this economic consideration to take into account. If you do it properly, if you follow safety regulations, then it is no longer economical. I don't know if that point was brought before.

I've heard somebody talk already about the health effects of this radioactivity. People focused on radon gas. However, I

don't know if this point was made: if radon gas is inhaled — radon gas then decays with a series of decays, ending in an isotope of lead, which is stable, and that entire chain takes 22.8 years for its half-life. "Half-life" means that after 22.8 years, you will have about half of that radioactive source in your body, because once you have inhaled it, it stays in your body and all these concurrent decays will happen inside your body. Over decades, it may cause lung cancer. We are not maybe seeing it yet because of two reasons. One is that it takes decades, and the other reason is that, although fracking was done for decades, fracking as we see it now, which is a lot more intensive, is newer. We could be seeing an increase in radon-induced lung cancer. We will be just on the beginning of that, so we cannot say that yet, but that is a risk to consider.

So, after 22.8 years, you get half of the material, but after double that time — so about 55 years — you still have one-quarter of the radiation. It takes almost 100 years and you still have well over one-sixteenth of this radiation. People tend to think, "Well, a half-life is this, so that means after that we don't have to worry about it." That's not true.

My last point is that if fracking is allowed in the Yukon, what will be done with this radioactive waste? Where will it be treated and where will it be disposed of? If we are to get fracking in the Yukon, does that mean we are also going to get sites for radioactive waste in the Yukon? Because if you treat it properly but you don't get rid of it here and you have to ship it south, that again adds to the cost, which makes it uneconomical again. That would be a double whammy.

I have some articles that I dug out and I am happy to give them later. Thank you.

Chair: Thank you.

Ione Christensen, followed by Richard Annett.

Ms. Christensen: Madam Chair and members of the Committee, over the last year you will have certainly heard a lot of statistics regarding fracking. Statistics can be used in many ways to strengthen arguments but are suspect, at best. Both sides of an issue can use them to inflate their positions and to sell their points.

To assess fracking, I would like to present a simpler, old-fashioned thesis: logic. I have never been great at science, but I do understand some of the basic principles — what goes up comes down, what goes down often comes up, and every living thing on the Earth has to have water to survive, and that only 10 percent of all the water on the Earth is potable and that five and six percent is frozen in the poles.

I do not pretend to be an expert in this field, but I do know a little bit about the oil business. In the '80s, I was on the board of directors for Petro Canada and Panarctic Oils. I visited Norman Wells, the island platforms of the Beaufort Sea, the Rea Point gas wells on Melville Island, and gas platforms off Sable Island on the east coast of Nova Scotia. With all of those, we had extensive briefings and I studied hard to make myself informed. Lateral drilling was a new concept then in water and fire flooding. In Alberta, more water was being used in the oil fields than for agriculture. One can only guess at the percentage today. We were just

beginning to explore tar sands, but it was not looking very promising. Oil would have to reach \$80 a barrel to make it profitable, and today it is over \$100.

I am sure that you have seen the schematics for fracking sites — large cleared areas, numerous trucks and tankers on the roads, and contamination of great quantities of water and sand. Is this what we want for the Yukon?

Theory has it that water, sand and chemicals are first pumped down the wells under great pressure, small holes are punctured in the lateral pipe to create fractures, and all the water and chemicals will then be recovered by pumping them up and putting them in a safe holding tank for treatment. Following that, the freed gas or oil will be sucked into the pipes and up to the surface to be processed.

Now, logic would tell us that when the fracturing of the substrata shale and sandstone takes place, it will not just happen below the lateral pipe. It will radiate out in all directions, and the sand will do its job by filling the fractures and making them porous so that everything can migrate through it. Logic tells us that most of the gas and water in the fracture above the pipes will quickly escape upwards while some of the remainder will be captured and pumped up to the surface. As the escaped water makes its way up, it may encounter aquifers where it will mix or it may just continue on to some undisclosed location and be released with the gas and the methane, but, either way, the toxins have now entered the environment.

Logic tells us that the substrata shale and sandstone have become destabilized. Then, when the water and the gas or oil is pumped out, cavities are formed and the fractured shale will collapse, further destabilizing the layers above. Theoretically this shouldn't happen, but in reality it does.

You see, the problem is that we do not have the history on this relatively new hydrocarbon extraction. Fracking is the last desperate attempt of the oil industry to suck the last little bits of the hydrocarbons out of the Earth, and we don't know what the costs are.

The question is, are we, as Yukoners, willing to take the risk? It's a crap shoot, and I for one do not want to gamble the health of the Yukon on it. We are no strangers to the boom-and-bust economy where all the money goes out to corporate heaven and two years down the road we Yukoners are wondering what really happened.

In my opinion, logic has the loudest voice and, over the years, we have seen examples of failed mine closures — Faro being the one unhappy poster child. There are still many decades of work left there at the taxpayers' expense. Faro was before devolution and the responsibility of the federal government. However, all new developments after devolution are the full responsibility of the territorial government.

If the government is to move ahead, regardless of the wishes of Yukoners, and if the government and industry are so confident in the safety of the process, then an independent assessment should be done of all possible mitigation costs which occur, and the companies should pay those costs up front in a trust before a single casing is drilled. Better still, we

should have legislation to prohibit fracking in the Yukon, but with the ability to reopen the bill should it be scientifically proven that fracking is safe and clean for the environment.

Chair: One minute please.

Ms. Christensen: In the meantime, everything should be done to find alternative hydrocarbons. It's out there. We are not starting from square one and, once found, it will be a \$1-trillion industry. So, let's go for it. I like those odds.

Now, you go into public life to make a difference, to leave things better when you go. All members of the Legislature are Yukoners. We can only hope that you love the Yukon, the lifestyle and the environment as much as we do and are prepared to protect it. What will be your legacy?

Chair: Thank you very much.

Richard Annett, followed by Bernard Walsh.

Mr. Annett: Thank you. Good afternoon. I would like to ask you three questions please. Which of your political parties are against fracking? Shall we take it that all political parties are pro-fracking? Who amongst you would toe the party line as opposed to representing your electorate? Can we take it that the Committee is pro-party line rather than pro-electorate? Have any of your parties received any fracking company's money to support your parties, or any shareholders of fracking companies? Maybe you don't know.

I think that if fracking was to be put in a court of law as a defendant and you were the juror, I don't think it would be a fair trial, to be honest.

When would be a good time to do fracking? We've got to accept the fact that it will come up here at some stage, but could I ask for a moratorium for at least about 10 years, simply because there are so many countries around the globe busy pushing fracking to the limit? Just recently, Argentina's found 150 years' worth of LNG supplies in their land and they are going to be pumping it out as soon as possible, so the market and the price of LNG is going to be low for a long time. So I would suggest that you would all keep it at bay for a long time in this territory. It gives you a bit of time then to figure out what you're going to do with any of the tax revenue — whether you are going to use it to work off the interest and store it, a bit like the Norwegian's story about their oil development.

Supposing fracking does come into this territory, regulations that you would have possibly had 10 years to get into play should be well-placed and pretty tight. I would like the following to be part of the regulations if at all possible. I would say that the regulations should not be able to be relaxed, only tightened. The regulations cannot be from the fracking industry or have any shareholders or links to it. All people on the regulatory board should be publicized so that anyone from the public can investigate them for any ties or links to the industry. In your seismic surveys, I would say you should not be allowed to use clear-line surveys — that they are not allowed to clear the line along the fracks. I'm sure you've seen that when you've been touring around. They can do the surveying without having to put a bulldozer along the line. If you can make that into the regulations, that's good. All

installations should have a three-metre band around them to minimize visual and noise intrusion and they should have a minimum footprint — or preferably be put underground so there's no footprint at all. All sites should have a water baseline study done by an independent environmental company that has never had prior dealings with fracking companies. All the original data should be freely available and all the interpreted data should be freely available to the public. Monitoring should continue for at least three years after the fracking has ceased. They should have access to all the wellheads, backwash tanks and they should come and go as they please to monitor the situation. All monitoring data collection should be made publicly available in real time — something that is possible now — so that members of the public can keep an eye on the industry. Air-quality monitoring should also be conducted. I don't think there's enough of that, listening to the various talks that are going on in the papers. All this monitoring and compliance-monitoring should be paid for by the industry, via government in open tendering.

I concur with an earlier speaker who said that there should be bonds in place for clear-ups, spills, decontaminations and post-operational pollution and it should be in place for at least 10 years, so if anything does arise, you can call on the bond if the company has gone bust. I think that concludes all the points I have on regulation, timing and whether it is a fair show or not. Thank you very much.

Chair: We will hear now from Bernard Walsh. We're then going to take a 10-minute recess. Following that, Jill Pangman will speak. Thank you.

Mr. Walsh: Good afternoon, my name is Bernard Walsh. I am presently a student at Yukon College taking an introductory program to carpentry.

From the various public presentations, documented cases and discussions, I am convinced that fracking is harmful to our environment, health and society. I am horrified from what I have come to understand. Can you imagine turning on your tap for a glass of water and only gas coming out? Madness, I say.

Can you imagine an industry that refuses to divulge what chemicals it is sending down its wells for fear of divulging trade secrets? Not accountable, I say.

Can you imagine your next door neighbour dying of cancer because that person was exposed to the carcinogens found in fracking water? Sad, I say.

I am against fracking because it destroys the very essence of our being, for without pure and clean water, we are nothing. Have we forgotten something? Martin Luther King Jr.'s "I have a dream" resonates strongly in my being. I have a dream of one day building a small cabin on a beautiful river in the Yukon where people may come to enjoy nature, find peace and tell stories of a world taking care of one another, all powered by solar energy and yes, the occasional wood fire. Sadly, that dream is being jeopardized by the present Yukon Party government led by Darrell Pasloski.

Their track record of not respecting democracy and the will of the people is cause for alarm. Witness their refusal to

accept the *Umbrella Final Agreement* and protect the Peel. Witness its decision to construct an LNG plant in Whitehorse. Witness its flip-flop on building affordable housing. Witness the debate in the Senate on the YESA agreement, where Darrell Pasloski has publicly stated he would abdicate his territorial power for reasons of expediency. Witness its inability to negotiate with Yukon First Nation governments. This is a government that neither respects democracy nor the will of the people. Consequently, am I to believe that what I have to say or what others have to say at these fracking hearings will not be heard by the Yukon Party government?

What I can't understand is how we have gotten to this point in time where the people are not heard and respected. Let's turn things around. Democracy needs to be overhauled. Let us voice the real questions. What can we do today to lessen our immediate reliance on fossil fuels? What concrete steps can be taken to developing the technology and the use of renewable resources? This is the debate we should be having today.

Just this week, the United Nations Secretary-General Ban Ki-moon made an announcement at the 2014 Climate Summit.

Chair: One minute please.

Mr. Walsh: Leaders from government and public and private sectors are committed to action on climate change. But what is happening at home? I have several questions for the Committee. Has the present Yukon government and community clearly established its objectives to reduce the threat of global warming? To what extent does fracking hinder this process?

Another highlight of the summit made by the secretary-general was the announcement that there is a new compact of mayors, representing 200 cities with a combined population of 400 million people. They pledge new commitments to reduce annual emissions. Was our Mayor Dan Curtis part of this compact?

Along with many other people, I am against fracking. Please make sure my voice is heard in the Legislative Assembly. As elected officials, that is your job. Thank you.

Chair: Thank you very much. We are going to be recessing for 10 minutes. Please help yourselves to coffee and snacks.

Recess

Chair: We're back.

Jill Pangman, please, followed by Annette Belke.

Ms. Pangman: It appalls me that our government is even considering allowing — actually welcoming — fracking into the territory. This to me is complete insanity. It is well-known, the harmful effects of fracking practices on the environment, as well as on the social fabric of communities that allow it in their vicinity. I won't repeat the list of these impacts, as you've heard them again and again from written submissions and oral submissions of concerned people throughout the territory.

We only have to look south of the border to witness the harmful impacts of this industry close to home. I suggest that proponents of fracking in the Yukon actually move to Fort Nelson or Fort St. John for a long enough period of time to actually feel the impacts.

What I don't understand is the sense of entitlement proponents of harmful industries have to the land and the life support systems of this planet. What gives them the right to destroy what belongs to all of us? Remember, we are only one species on this beleaguered planet that is being laid to waste by our ignorant and self-serving practices.

I moved to the Yukon 30 years ago because of its wild nature and its clean water and pure air. For 25 years, I've been taking visitors throughout the Yukon as a wilderness tourism operator, as well as Yukoners themselves, into the Yukon wilds to experience for themselves this gorgeous territory and I have witnessed again and again how transformative these experiences are. The Yukon's landscape and pure waters and habitat for wildlife are her greatest resource by far. We have the opportunity to be a beacon of sanity on a global scale. Why is our government making choices that ruin this opportunity?

As far as the economy goes, tourism is a major contributor to the Yukon's economy, and unlike the mining and oil and gas sectors, it is not boom and bust. It has the potential to be a long-term contributor. But the more we damage the Yukon's environment and social fabric of our communities, the less attractive this territory will be for visitors. I doubt Fort Nelson and Fort St. John are a major draw these days.

It saddens me, however, that I even feel a need to even bring up an economic argument for banning fracking or any industries that damage the life support systems and quality of life for humans and non-humans alike. Considering practices like fracking is simply a measure of the insanity that the global industrial machine is spinning. No amount of money — and fracking is an example of extremely short-term money — is worth sacrificing the ability of our life support systems to support life. Thank you.

Chair: Thank you.

Annette Belke, please, followed by Anne Macaire.

Ms. Belke: Hello, you can see I am a caribou and I was elected to speak in behalf of all wildlife in the areas proposed for fracking.

White man considers poisoning our water and polluting our habitats. It is all about white man, just for the sake of his needs. Heavy machinery will harm us and scare us off. Where could we go to? Will there be any space left for us? Will we even be in good enough shape to leave anymore? Who was first, wildlife or people? We are ready to share our habitats with people who respect us and think ahead but we are not willing to let our habitats get distracted and abused. We do not accept dictatorship of greed and fast money. We animals would be the first who will have to leave or to die and then the people with whom we shared this unique cold paradise for centuries. The oil companies and their slaves would cause so

much harm and such a bloodshed. By the way, no tourists want to see that. That would be a big job loss for this region. Why go for a short-term thing that cannot be repaired any more? Don't go for the oil rush. We animals say, don't do it. Just don't do it please. Please respect the land and the ones who belong here. Don't do it. Please, don't do it. Thank you very much.

Chair: Thank you.

Anne Macaire, please, followed by Malcolm Mills.

Ms. Macaire: My name is Anne Macaire and I am opposed to fracking in the Yukon as well as everywhere else in the world.

I'd like to begin by thanking the Committee members for your commitment to taking seriously the gravity of the topic being discussed today. In the 42 years I've lived in the Yukon, I feel this is the single most important environmental and social issue that we have been confronted with. It represents a crossroads, the outcome of which will impact the Yukon for many, many generations, if not forever.

The landscape in which we live defines who we are. It shapes our culture and shapes our relationships, both to the natural world and to one another. The decision to radically alter our natural landscape, which here in the Yukon is so deeply beloved by so many, will not only tragically impact the environment, as others have eloquently and knowledgeably spoken to, but it will also impact the soul and spirit of its people.

The question is, will we choose to see the natural environment as a commodity and take the road of development that can only lead to defilement of the water and devastation of the land regardless of industry's promises of responsibility that hold very poor track records? Or do we, with new vision — new maturity — realize and act upon the realization that it is the land that holds our deepest healing, our wholeness and our well-being? This is the crossroad. I ask this Committee to take the path of the visionaries, embracing alternative energy sources, embracing true stewardship of the land and a legacy of preserving our pure water and pristine wilderness for future generations — a vision we cannot only be proud of, but can participate in with passion and a sense of integrity.

In closing, it's clear that fracking is controversial. Given this, how can we possibly justify jeopardizing this land that we hold so dear to the whim of an industry that does not have our best interests as Yukoners at heart? Thank you.

Chair: Malcolm Mills, please, followed by Joe Tetlich.

Mr. Mills: Thank you very much, Madam Chair and members of the Committee, as well as the Ta'an Kwäch'än and Kwanlin Dun First Nations for having this gathering on their traditional territories.

Normally I don't prepare anything, but this is far too important for me to try and put everything that I want. I will keep this short.

My name is Malcolm Mills and I am against the practice of hydraulic fracturing. I urge this Committee to understand that as you prepare to submit your recommendation that this

was never intended to be a divisive exercise, to have the population state whether or not they agree or disagree with this harmful extraction industry. This exercise is about democracy. The position of the electorate has been loud and clear. We the electorate have publicly gone on record. The closed-door industry lobbying is being drowned out by our voices.

I heat my home and my hot water with solar, engineered and fabricated in Germany, not China. If this government wants to create jobs, the renewable sector has been proven to create 10 times more jobs than the natural gas industry. Unfortunately, it does not receive the billions in federal, territorial or provincial tax credits that the oil and gas industry does. We have world-leading renewable engineers and scientists who live here in Yukon, yet they're provided little or no opportunity to make their living by working here. Let's become leaders in something that we can proud of.

I have two children. My daughter will turn seven in the new year and my son was born in 2010. Shortly after his birth, we became aware of his health issues. For the last four years, we have been fortunate enough to travel to B.C. Children's Hospital. We have been fortunate as well to stay at Easter Seals House on our many visits. Our family always took note of the map of western Canada that was displayed proudly on the front lobby. This map had pins to show where people had travelled from. There were an awful lot of pins there that were placed in the northeastern part of British Columbia — too many for the relatively small population base compared to other areas of the province. That map is no longer on display. When my family asked why, we were told that it was due to the disproportionate number of pins originating from northeastern B.C.

If you, this elected government, decide to side with multi-national, multi-billion-dollar corporations and foreign Crown corporations as opposed to your electorate — your bosses — I recommend that you prepare your resumes long before the 2016 election because your willingness to harm our futures will result in you having no future as our elected officials.

Thank you very much for your time and consideration.

Chair: Thank you.

Joe Tetlich, please.

Mr. Tetlich: Thank you very much. Thank you for giving me this opportunity to speak to the select committee on hydraulic fracking.

I represent the Porcupine Caribou Management Board. I'm the chair of the Porcupine Caribou Management Board. Our mandate is primarily making sure that the health, habitat and the continuance of the caribou is adhered to — meaning that we've always wanted the caribou to be here for future generations. Just before I start out, I'd just like to say that I don't want to be here in the next 30 or 40 years talking to people — and one of the things that we've always said is that we talk on behalf of the caribou, but more importantly, we're here for future generations. I think we have the ability now to make good decisions in regard to our future generations. I think that we need to look at it that way.

I come before the Committee, not as a person who is going to go against or challenge the Committee or the government, but in my role as a PCMB rep and as the chair, we come before the Committee in trying to work together. I think that's our main objective, to see how we can walk together. I always use that phrase because I chaired the Porcupine Caribou Management Board for 20 years and we have a harvest management plan with the caption, "walking together." So we can look at it in that context and I think we're all going to win, but if we lose, we're all going to lose. I would just like to say that.

The Porcupine Caribou Management Board — we heard a lot of talk in regards to fresh water and the contaminated groundwater. My presentation is going to be about surface disturbance. I think that's really important because one of the things that we are really concerned about is the footprint that the so-called "developers" are talking about — small footprints.

Small footprints — if you have a lot of small footprints, they become one big footprint. If you just look at what happened 40 or 50 years ago in regards to some of the habitat range on the Porcupine caribou, it's criss-crossing. While we speak, there's actually development and exploration going on in the Porcupine caribou habitat range. We need to do something in order to make sure that we keep something.

It's going to increase with seismic lines — the linear surfaces, like the cutlines, the drilling well sites — increase in traffic. That's one of the things that we've talked about over the years — the cumulative impacts. What are the impacts of development if you get a large footprint? What you're going to have are serious concerns in regard to the Porcupine caribou habitat and the health of the herd. We are looking at maybe thousands and thousands of truckloads of stuff going in and out of the habitat range. That could hurt the Porcupine caribou.

We just heard in a presentation prior to me by the caribou people that the caribou can't speak for themselves, so we are here to make sure that there are regulations in place so that the caribou are not going to be — we call it belly-up. If you look at the other herds in Canada they are decreasing rapidly — by 97 percent — if you look at the George River herd and you're looking at Yellowknife, where they have gone right down with the Bathurst herd too.

Darius can adhere to this — that caribou is very important to our people. I think we need to look at it. If you look at some of the research that's happening in regards to disturbances in 30 or 40 years that happens because of climate change, one-fifth of the habitat range of the Porcupine caribou will be up in smoke because of the all the fires that are going to be happening. These are reports that we have been getting.

One of the things that the Porcupine Caribou Management Board looks at is development. For the record, the Porcupine Caribou Management Board is not against development by responsible government. I think we need to look at it in a realistic way. My last word is we need to work together for the caribou and future generations.

I don't have much time — but thank you anyway. Mahsi'.

Chair: Thank you.

Peter Obermueller, please, followed by Sandy Johnston.

Mr. Obermueller: Hello, my name is Peter Obermueller. I have lived in the Yukon for 11 years. I'm against any form of fracking anywhere in the Yukon. As a matter of fact, I'm against fracking anywhere in Canada.

The process of fracking has not been developed because it is a reasonable or safe method of gas extraction, but it has been developed because conventional gas deposits are declining. Now unconventional gas and oil deposits are extracted no matter what the environmental costs. The only thing that matters in the fracking process is that gas is extracted. All negative consequences and risks for the environment and the humans are ignored. The Yukon is one of the few areas in the world where we still have uncontaminated fresh water. Let's keep it that way and don't waste our fresh water by polluting it and pumping it down into fracking wells.

Also, fracking changes the landscape. Here in the Yukon, we are extremely fortunate that we are still left with a largely undisturbed ecosystem — one of the few left in the world. Fracking would criss-cross the landscape with a grid of seismic lines and access roads to a tight pattern of fracking wellheads.

Fracking would also change the political and democratic landscape in the Yukon. I believe if fracking would be allowed in the Yukon, the very big and wealthy fracking companies — many of them owned by foreign countries — would slowly, over the years, gain more and more political and decision-making power. It can be seen, for example, in Alberta, what huge lobby and political power the oil and gas industry has obtained. Regulators are tied in with the government and its oil and gas companies. This goes contrary to our democratic system that we have, where the power is supposed to be held by the people.

The environmental damages and risks of fracking would be tremendous and permanent. For example, who really believes that the oil and gas industry will clean up their mess in Alberta? After the oil and gas deposits run out, I believe the oil and gas companies would simply dissolve and walk away. The regional population government would be left with what to do about the mess. A clean-up would be impossible, in my opinion. Thank you.

Chair: Sandy Johnston, followed by Jannik Schou.

Mr. Johnston: Thank you to Kwanlin Dun and Ta'an for allowing us to meet in this building to present to you. Over the past couple of years, I've spent countless hours trying to better understand the issues around fracking, and this quest started a few years ago after a trip up the Alaska Highway when my wife and I had to abandon our plans to camp at a favourite public campsite south of Fort Nelson due to signs posted by Encana which prohibited unauthorized access and warned of dangerous sour gas.

Upon our arrival back in Whitehorse, I did a web search of Encana, which led me to an article entitled, "EnCana's Cabin Not so Homey" — cumulative environmental effects,

an unfolding and emerging crisis in northwestern B.C. The article was an eye-opener. An estimated 1.8 million cubic metres of water, 78,000 metric tonnes of fracking sand and 36,000 cubic metres of toxic chemicals were used to frack 14 wells on one pad — a world record. Back then, it seemed oil and gas companies were quick to claim world records and there seemed to be quite a bit of competition between Encana and Apache.

My research into fracking has revealed many issues, some of which the Committee has heard or had experts present on — issues around huge quantities of water, toxic chemicals used in frack fluid, the issues around the lack of baseline and environmental data, the lack of information about the cumulative effects, problems with well integrity, the water contamination associated with that, huge issues with fugitive gas emissions from leaky wells and from the infrastructure of the distribution systems, water contamination issues associated with flowback and waste disposal, the massive footprint left as the fracking operations march across the landscape — roads, borrow pits, stream crossing, pipelines, not to mention all the infrastructure associated with each well pad. Such development has fractured the habitat and has led to the demise of wildlife, such as the caribou herds in northeastern B.C. and northwest Alberta.

The speed at which this industry progresses is mind-boggling. The speed at which permits are issued is also mind-boggling. It's funny that the environmental review, monitoring and enforcement processes are much slower.

There's a constant reference to the inability of regulators to keep up with this pace of industry. There are impacts to human and animal health. Fish and livestock have died as a result of spills and human health has been affected. The list goes on.

The linkages between fracking and LNG and the lofty targets for new exports have not been adequately explained. We heard about the 50,000 wells previously. Most of this will have to come from frack wells from northeastern B.C. in an area the Committee has already heard has been described as an environmental disaster.

My conclusion is that fracking should not be allowed in the Yukon. The high risks associated with water use and contamination and to habitat fragmentation are big concerns for me. For example, the chum salmon of the upper Porcupine and the Fishing Branch and the chinook salmon of the neighbouring upper Porcupine tributaries depend on high-quality water with adequate flows. What do we know about the interconnectedness of the aquifers from Eagle Plains and the adjacent upper Porcupine watershed? What impact will oil and gas development have on the over-wintering Porcupine caribou herd? What incentive will the U.S. have to safeguard the calving grounds in the Arctic National Wildlife Refuge if they see the over-wintering habitat being degraded here? Is it already too late though? As we heard, development is already proceeding.

But perhaps the biggest concern is over fugitive gas emissions and the major contribution to the greenhouse gases

and climate change. The failure of industry to contain leakage over decades suggests remedies to this are not likely to occur soon. The nature of shale gas extraction requires many wells to be drilled and there already are and will be many more pathways for methane to leak into the atmosphere.

You have heard experts tell you that there's no assurance that well casings will remain intact for future generations. Recent reports from the IPCC are emphatic that greenhouse gas emissions associated with fossil fuels must be reduced, and quickly. These warnings have been echoed time and time again, most recently by the U.S. National Climate Assessment program and by the International Programme on the State of the Ocean. Last week in Whitehorse, the chair of the Arctic Monitoring and Assessment Programme, described how climate-induced changes in the Arctic are proceeding at unprecedented rates and at rates much higher than anticipated. Changes in the Arctic are accelerating in irreversible feedback loops. The more it warms, the faster it warms; the more the permafrost melts, the more greenhouse gases emitted, resulting in more melting.

Chair: Thank you very much.

Mr. Johnston: We cannot afford to do this.

Chair: If you would like to leave your written copy with us, we'd be happy to accept it. Thank you.

Jannik Schou, followed by William Drischler.

Mr. Schou: My name is Jannik Schou. Thank you for giving me this opportunity to speak.

As many people have already talked about their concerns about water, I'll talk about something different. I'd like to start by saying about risks and benefits that the word "risk" implies probability, a chance that something goes wrong, when really, it's only a matter of time before something bad happens. Accidents happen big-time, as we frequently see.

I'd like to talk about certainties. One certainty about fracking is the massive, irreversible transformation of the landscape from a wilderness or rural area into an industrial playground. As shale gas occurs over large areas, it means a lot of infrastructure which gradually, over the years, spreads like a cancer over the land. The industry has a huge footprint and will change our Yukon forever.

There are country roads in Pennsylvania, where 50 to 60 trucks pass every hour, 24/7. Imagine what that does to people's lives and their property values. In Fort Nelson, over 1,000 trucks come through town every day in the winter, when it's busy over there, lining the streets at night bumper to bumper. This spring, I flew over the Northern Cross exploration area at Eagle Plains, which only confirmed what I already knew because I've also flown over the Liard and Horn River basins and driven hundreds of kilometres on resource roads in the Fort Nelson area. I know what's on our doorstep.

We have a chance in the Yukon to do something right from the beginning — well, almost. Never before in the history of the Yukon have so many people tried to tell so few, for such good reasons, why not to take this path. I hope you will listen. If the Committee concludes that it is in favour of fracking — which would be insane given all you've heard

from Yukoners — it'll be a decision which will haunt you forever. If we don't learn by our mistakes, history is bound to repeat itself. Thank you.

Chair: Thank you.

William Drischler, followed by Doug Mowat, please.

Mr. Drischler: I'd like to thank you, Madam Chair, and the entire Committee and the Kwanlin Dun for this opportunity to address the Committee.

I want to talk briefly about the problem of glut and natural gas production and make a proposal that I believe could solve many of these fracking problems. Glut, simply put, is that far more of a commodity has already been procured or produced than can be sold on the market. A manifestation of this — the current glut is that there are dozens of capped natural gas wells in Alberta and British Columbia. This means that in fact, there's no entrepreneurial profit in drilling for natural gas and it doesn't meet any energy needs since increasing the supply will have no effect if it cannot be purchased.

So if the natural gas companies aren't particularly interested in entrepreneurial profit, meeting energy needs, or generating jobs, why this fracking campaign? The reason is that they're seeking state welfare. It's a state welfare source for them. In this regard, I have a modest proposal that could solve many of the problems related to fracking — namely, pay the natural gas companies not to frack. Paying them billions of dollars would be a cheap price because the costs of trying to repair the environment if they're allowed to frack at will means that we could have up to a quadrillion dollars of damage to the Yukon watershed area. A quadrillion dollars, for those of us who aren't used to big numbers, is 1,000 trillions.

Now my proposal is not radically new — it's old-hat. There's a great precedence in the U.S. The U.S. has been paying wheat farmers not to produce wheat since the 1930s. Has that resulted in a food shortage in the U.S.? No way. If you've travelled there, you'll notice there are tens of millions of people who are overweight.

So I would say as a policy economist, there are really only two policy possibilities here: (1) paying the natural gas companies welfare to trash the environment even though there's no entrepreneurial profit in the fracking and it does nothing to supplement or meet energy needs; or (2) my simple plan: pay them welfare on the condition that they don't frack — very simple. I know people will criticize my proposal. They'll say it's analogous to paying the Mafia protection money, but you know, when the Mafia gets its protection money, you get protected.

I would ask the Committee to consider this policy alternative of simply paying oil companies not to frack. Thank you.

Chair: Doug Mowat, please, followed by Brian Eaton.

Mr. Mowat: Good afternoon. I am against fracking. I only really have one area to comment. I'm wondering if the Government of Yukon members, as well as the Premier, have read the agreement with the European community that we're

about to sign. What will happen there is that anything that's presently allowed will be allowed to be forced by any European country that has the desire to frack in the Yukon. I think that would also include the wells we already have — that the rest of the Yukon may well be up for grabs once this agreement is signed. I think it would be great if people would write to the federal government expressing concerns. I think there is great danger with the Premier's previous record of trying to waffle around an issue. If one well is allowed, the Yukon is up for grabs.

I also think the idea of regulations is really off the table. There are no good regulations and they're not about to be developed. Thank you.

Chair: Thank you. Brian Eaton, please, followed by Kathy Elliot.

Mr. Eaton: Many of you may probably be aware of the increased seismic activity in the form of earthquakes in the State of Oklahoma. Now, Oklahoma is an area that is not normally prone to earthquake activity but recently there has been increased earthquake activity. Of course, Oklahoma has been the site of a lot of hydraulic fracturing activity.

As evidenced by the seismographic devices in the area of Kluane Park, there's a minor tremor recorded in the Yukon practically every day. Now, the reality is that the Yukon is in the middle of a very prominent earthquake zone that extends from California clear through to Alaska.

Last night, some of you here were present when we were addressed in this hall by Mari Margil and Thomas Linzey from the Community Environmental Legal Defense Fund. Among the many matters that they talked about, they addressed the process that we're engaged in today — the cosmetic consultation process — the process that governments at the federal, provincial, territorial levels are so fond of. It's a process that was engaged in for so many years by government around the Peel River land use planning proposal, a process that resulted in the territorial government ignoring the plan and instead, going ahead with its own predetermined agenda.

Now, similarly, it's the same process whereby the territorial and federal governments proposed to collude in bypassing the Yukon environmental assessment board's powers, enshrined in the land claims *Umbrella Final Agreement*, and substituting instead policy directives from Ottawa that have been predetermined by government. The process that we're seeing here is to enable the agenda of the oil and gas industry to extract every last drop left of a depleted oil supply from the earth. It's a process whereby the regulating bodies are constantly allied with industry and its overriding agenda.

Hydraulic fracturing is a clear and present danger to our Yukon water supply, to our geothermal stability and our economic stability. It's time to put an end to sham consultations and put the power back in the hands of the people, as it was stated last night by the people from the Community Environmental Legal Defense Fund. It's not enough that we the people of the Yukon are involved in the

consultation process in terms of being invited to the table. We own the fracking table. Thank you.

Chair: Kathy Elliot, please, followed by Leo Busse.

Ms. Elliot: Hello. I appreciate the opportunity to come and give you my message face-to-face and my message is that I'm opposed to hydraulic fracturing in the Yukon Territory and want it banned. My message is that my family — my 10-year-old has given up a number of much more enjoyable pursuits to be here today with me. My family want it banned. My friends want it banned. All my neighbours feel that hydraulic fracturing has no place in the Yukon.

I wish I could say something that would compel the Yukon government to ban hydraulic fracturing. I have nothing new to say to you that you haven't already heard. I've come because I want one more person's name on the record as having spoken.

While I appreciate this opportunity, to be honest with you, I'm profoundly disappointed that we have to engage in this process at all. I am profoundly disappointed that the Yukon government is considering allowing fracking in the Yukon — that we're starting with an assumption that it should be allowed and now we have to fight tooth and nail and scramble and flail as best as we can to try and not have fracking.

I came from Alberta. I visited recently. In my experience, our natural environment that we have in the Yukon is equivalent to an endangered species. People come here to experience it. I can't — I don't want to state the obvious.

Here we are. We've come here today to tell the government what it already knows. People far smarter and more articulate than I am have said it already, but here we are. Fracking is dangerous. The risks can't be mitigated. It's permanent damage.

I have a 10-year-old son. He's in grade 5 and they're learning about government and democracy. He talks to us a lot about that. I find myself having to answer some difficult questions and not be cynical in doing so. My son is very aware of the whole Peel process and what happened there. My son has paddled the Wind River. He has been to the Peel and is a pretty aware 10-year-old. We try and present the other side as best we can about why these other interests exist. He's a little bit dismayed. So how do I explain to a 10-year-old in reasonable terms — who is learning about democracy — how do I answer a question: why isn't the Yukon government listening to the people? How do I answer that? Can I say to my kid, "Because somebody else's voices are more important"? That's all I can figure out.

I really feel that this process and the outcome are an acid test for the Yukon Party. Yes, people's political memories are short, but whatever happens in the next year in terms of, you know, spending that people love to see or the things that all parties do before elections to try and win favour — we're not forgetting. We're not forgetting what happened the last time. A lot of money was spent and a lot of people came out, spent a lot of time — and we all know what the government did with that.

I wish more than I can tell you — I hope that this public hearing process is truly a democratic public hearing process and that what we see the Yukon Party releasing in the media is what we all know. You know how strong the message is that you'll be taking back to ban fracking. Thank you.

Chair: Leo Busse, please, followed by Margaret Nefstead. Thank you to our last speaker.

Mr. Busse: Good afternoon. I worked until 2:00 in the morning so I don't have anything prepared and I'm just going to wing it off the top of my head here.

I used to work on a frack crew and all of these horror stories I hear for the most part come out of the States. Fracking in Canada does not harm drinking water. Yes, with the well construction the way it is now, you're looking at one well or one well pad as opposed to many, so you do get an increased amount of water into that particular pad or series of wells, but it is no different than it was years ago, except there is less ground disturbance and there is less of a carbon footprint because there is not as much travel that has to take place with the trucks — okay?

The only thing that can really seriously harm well water would be coalbed methane, and oil companies are moving away from that. But actual shale fracking — no, it doesn't hurt anything. It doesn't hurt your groundwater, and everything is regulated in Alberta through the energy and utilities board — everything from well construction to the amount of fluid that they use to what they can put in that fluid, how far they are away from water sources — and when it comes to H₂S, how close you are to populated areas. It's all regulated. There is no reason why that could not happen in the Yukon, should we decide to go ahead with fracking. If we decide to ban fracking, you are slamming the door shut for future generations to extract oil and gas, which is used in plastics, which is also used in solar panels, windmills, et cetera.

So give it a good long thought, okay? That's all I have to say.

Chair: Thank you very much.

Margaret Nefstead, please, followed by Angela Code.

Ms. Nefstead: I didn't come here planning to speak today. I am fairly new to the Yukon. I have only been here about 20 years. So I would just like to say a little bit about my experience, and that has been that, when I first came here, I felt like I was home. I felt the sacredness of the land. I felt the proximity of that sacredness right outside my door. What I think about all the people who are speaking today is that they are speaking on behalf of the sacredness of this very land. All the talk about fracking or even non-fracking or whatever — what we all have in common is this land. The land is sacred. It is my belief that each of us, as human beings, is here on this Earth to learn that we are all one, that we are one with each other, that we are one with every form of life on this earth, and that each and every bit and every one of us is sacred. As such, it behooves us to honour that, not disrespect that, not disrespect each other, but do what we can to honour our

mother, the Earth, and to take care of her with full heart. Thank you.

Chair: Thank you.

Angela Code, please, followed by Dennis Allen.

Ms. Code: [*Speaker spoke in Dene Yati. Text unavailable.*] My name is Angela Code. I am Sayisi Dene First Nation. I am originally from Tadoule Lake, Manitoba. It's a very small community that is very similar to Old Crow. I have lived in Whitehorse for a long time. My parents moved here when I was 10 years old and I consider Whitehorse and the Yukon in general like a second home.

I didn't really plan on speaking today, but after hearing everybody's testimonies, I felt like I should speak up because there is not a lot of young people here and there are not a lot of aboriginal voices to be heard here.

One of the reasons that my parents chose the Yukon to bring up our family was because of the apparent First Nations' autonomy in this territory. I grew up with indigenous values towards the land, and I think that across the board — like, there is many indigenous cultures who value the land and the animals and they want to see them protected, because we have age-old agreements that were made long ago.

I remember the story as a child that a long time ago, people — like the Dene — and the animals could speak to one another. They understood each other. Back then, it was easy to hunt caribou. They came around easily and they sustained our people. But one day the people disrespected the caribou so they didn't come around again, and it took this one medicine man to bring back the caribou to our people. But when he did that, he made an agreement with the caribou that the caribou will continue to sustain our people, continue to provide shelter, to provide food, tools — everything that we needed — as long as our people promised to protect them in return.

Nowadays, it seems like there's so many people who have lost that connection. They have lost those stories and people are so disconnected. I lived in Vancouver for awhile and it was hard for me to adjust in some ways because it was hard to relate to the people who had no connection to nature. They want water, they just turn on the tap. They want light, they turn on a light. They want heat, they turn on the furnace. They don't know where the streams are, they don't know where the natural springs are, and I think that it's skewing our view of the world, as a society.

Here in the north, we can see the connection much more clearly. We see the value of our territory and of our natural resources, and I think that we can be an example to the rest of the world, here in the Yukon, by saying no to fracking.

One thing that I am a personal advocate for is indigenous language and culture revitalization. To do that, we need a healthy environment because those things are all intrinsically linked. They need each other to be strong. I grew up hunting, fishing, and I've been getting into tanning caribou hides. That's something that I want my future children to be able to do as well. I hope that you decide not to frack in the Yukon, because I may not be an expert on that, but from what I've been hearing, it's not a good idea.

That's all I have to say. Thank you.

Chair: Thank you. Dennis Allen, followed by Richard Nerysoo.

Mr. Allen: Hi, my name is Dennis Allen. I am originally from Inuvik, Northwest Territories, but we live here — my wife and I are raising our two children here. Even though I'm from Inuvik, I have a long history here in the Yukon. My mother is from Old Crow originally. Her grandfather was the longest serving chief in Old Crow. My father grew up on Herschel Island, spent his whole youth on the North Slope, trapping. My brother Gerry served here with the RCMP in Watson Lake, Pelly Crossing, and here in Whitehorse. My sister Yvonne worked at the Skookum Jim Friendship Centre and her husband served in Tony Penikett's government, so I have a bit of a history here in the Yukon. Our family has been coming here — I have been coming to the Yukon since my early teens, so I have a long connection and I have family here in the Yukon.

I'm a filmmaker. I make films and I dedicate my life to telling stories about aboriginal people and their causes. I think what really bugs me is the current government and the people in the current government who are long-time Yukoners — born and raised Yukoners — who seem to have a disregard for people's wishes. You look back at court cases, you look back at what happened in the Peel and what happened with Ross River — it just seems to be an aggressive government.

I'm all for people working. I worked in the oil patch myself. I'm all for people buying \$50,000 trucks. But it just seems to be that there is a disrespect that wasn't here at one time. That's kind of disheartening, to see what's happening — to hear Premier Pasloski's interview on CBC yesterday regarding the YESA process.

I don't really have much faith in what is happening here today. I don't know if what everybody here is saying is really going to have much effect on the current government's decision to go ahead with fracking or not. I appreciate the gentleman's remarks there about fracking, and some of the truth, I guess, is somewhere in the middle — about the dangers of fracking. But I have worked in the oil patch and I have seen — once you open the door, that's it. We look at Fort Nelson, and once the door is open to fracking, it's going to get bigger and bigger, and they are going to need more and more.

I think we live in a society that is very self-centred. We live in a society where we talk about generations to come, but we are pretty comfortable with our pensions and we are pretty comfortable with our portfolios, and people want to make sure they are well looked after in their retirement. It doesn't seem that we really talk from our heart any more.

That is kind of disturbing because I love the Yukon. I love the people of the Yukon; it's our home now. To see the animosity between First Nations governments and the current Yukon government is disheartening.

I remember at one time when you shook somebody's hand, the deal was done. When you came out and did a public consultation, the government actually listened to the public. I

just wanted to share that with you. I also want to thank you for this opportunity. I really wish that this report is more than just an exercise to appease the public, to think they are being heard. Thank you.

Chair: Richard Nerysoo, please.

Mr. Nerysoo: Thank you. As you indicated, Madam Chair and members of the select committee, my name is Richard Nerysoo. I hadn't thought about speaking, except that I came here listening to what has been said. I am, as one would say, new to the Yukon in the sense of moving to Whitehorse two years ago so that my wife could attend college.

The fact is that I graduated and went to high school here in Whitehorse — graduated from F.H. Collins. Many of the people who have served as members of the Legislature — I have had an opportunity to either go to school with them and serve time with them because I was a member of the Northwest Territories Legislative Assembly for 16 years, and I was the Premier of the Northwest Territories. I have been the chief and I have been the president of our Gwich'in Tribal Council in the Northwest Territories.

I have listened to the conversation both publicly and in the newspaper, and even watched your select committee on TV. One thing that is clear to me is that I'm glad that the conversation is happening. I know there was a comment earlier that we shouldn't be here, but our creator created this condition for us to be here so that you could hear the strongly held views of the public and the people of Yukon. I think it's really important that you hear their views — no different from Justice Berger had to hear the views of the First Nations and Yukoners about the Mackenzie Valley pipeline in the 1970s. In many ways, this is your Mackenzie Valley pipeline. This whole conversation about fracking is your turning point. The public needs you to hear what they have to say.

I come from families that — even though I was born in the Mackenzie Delta and in Fort MacPherson, my family comes from the Yukon. Some of them sitting here at your table are related to me. I have family relatives in Mayo. What is clear to me, though, is that this whole issue that we are talking about clearly shows that there is, number one, an unwillingness to understand that treaties — whether or not you call them land claim agreements or numbered treaties or historical treaties — are the foundation of a relationship between the First Nations and the governments and the people of the Yukon, or wherever they sign those treaties. That's the foundation. That's not the end. All of the structures of institutions that are in those agreements should be guiding the discussion and the conversation.

The environmental terms and rules by which you guide yourself in the Yukon or, for that matter, any other jurisdiction, should be strong enough to stand the test of time. Instead, we are fighting continuously about the strength of those rules and processes. We can't do that because it creates uncertainty in the minds of the people and the public, and it creates doubt about whether or not governments are listening to what they have to say. They have to have confidence that

your involvement in these processes are not intended to create conditions by which governments can proceed, but rather that people, the public, can have confidence that the processes are there to defend their interest. That's not happening at the moment. It's not happening across the country. It's not happening in the provinces. It's not happening in the territories.

We've got to get back to that, where governments are directed by their people, not governments directing their people. The foundation is land and our resources, and if we don't understand that, then we are forgetting the very fundamental responsibility that we have for our people.

Thank you very much.

Chair: Thank you very much. Rick Halladay, please.

Mr. Halladay: I just came in the door and here I am. Anyway, I made a special trip in today specifically to say a few words here. I'm not going to be long-winded about it because I'm not all that good at public speaking to start with, and so many other people have said exactly how I feel about all this and they've done a lot of homework with it.

I think our biggest enemy right now is the silent majority. It's perceived a lot of times, people don't say anything so they agree with what's going on. The fact of the matter is they just think somebody else will look after it or they're going to go ahead and do it regardless of what we think anyway, so what's the point of bothering. But I think it's a time to stand up and be counted and I'm here to say that I am opposed to this fracking idea totally. I tried to keep an open mind regarding it, but I haven't heard anything good from the people that are for it. I've been listening to the other side and I've been doing some looking for myself. I think the risks are far too great to even entertain the thought of doing that. It should be just shelved and forget it.

Once again, so many people have been up here and spoken — and very eloquently — and they worded exactly what I have to say about it. I'm totally opposed to it. Thank you.

Chair: We're going to ask Geri-Lee Buyck — I hope I said that right — to come up to address the Committee please. Ms. Buyck will be our last speaker today.

Ms. Buyck: Thank you guys again for this opportunity. I did have a chance in Mayo in July to speak, but it was very last-second and I wasn't prepared, so I'm going to give it another shot.

My name is Geri-Lee Buyck, and I am the youth councillor representative for Na Cho Nyäk Dun. I would like to note that it was very unfortunate that the hearing committee that was held in Mayo in July was during the same week that the majority of NND elders, youth and citizens were in Whitehorse for the Peel court case. I can guarantee that would have had more voice their concern if the date would have been postponed. I will plan on getting a list of signatures and submit it to whoever it may be so you can see the high majority that do not support fracking in the Yukon Territory.

On behalf of the NND youth, fracking does not strengthen our communities; it divides them. We do not want

that for our community. They say fracking will bring us wealth and jobs. It will not. Instead, it will destroy and take away what we value most: our water, land and wildlife that we depend on. How can you say fracking will bring progress and opportunity when it simply doesn't?

Our First Nation has worked with the mining industry for many years. It has not always been easy, but we've made some progress. The fracking industry is not one we want to see on our land ever. Fracking has no place in the Yukon or on our traditional territory. I don't want to see my generation and those down the road dealing with the devastation fracking will bring.

My generation and those to come deserve the right to clean and plentiful amounts of water. They deserve to be able to go out with elders to learn, to be on the land, and not have to worry about whether the moose and caribou will be gone. They deserve to live in a community that is striving toward renewable energy sources, not investing in planet-warming fossil fuels.

I strongly urge the Committee to take us seriously and to give our young voices the same, if not more, weight as the oil and gas industry. We deeply recognize that what we have in the Yukon is unique and special, and we must do everything in our being to protect it from fracking. We're aware that the depths of forever continuing to stand up against what we know is wrong will be tough and tiring, with endless amounts of energy being put in, but we will defend what we and many Yukoners know to be the most beautiful and pristine place on Earth.

As more of us come together, young and old, to educate and empower one another, our voice and will to stand up to use it will be so powerful that the voices of "thank you" from the seven generations down the road will be well-worth our efforts. Thank you.

Chair: Thank you very much.

I want to thank everybody who came out today and shared their views and opinions with us. This concludes the public hearing segment of the Committee's work. Yukoners do have an opportunity until September 30 to submit written comments. So thank you very much. We're mandated to file a report by the end of the fall sitting, so sometime in December is what we think we'll be able to accomplish. Thank you very much.

The Committee adjourned at 4:03 p.m.