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SELECT COMMITTEE REGARDING THE RISKS AND BENEFITS OF HYDRAULIC FRACTURING

Public Hearings: Evidence

Tuesday, July 8, 2014 — 11:00 a.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: Tara Wheeler
Robert Moar
Eric Fairclough
Carla Gage
Bev Brown

EVIDENCE**Carmacks, Yukon****Tuesday, July 8, 2014 — 11:00 a.m.**

Chair (Ms. McLeod): Good morning, everyone. I would like to call this hearing of the Yukon Legislative Assembly's Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing to order. I want to start this morning with an introduction of the Committee members.

I'm Patti McLeod and I'm the Chair of the Committee and the Member of the Legislature for Watson Lake.

Mr. Elias: [*Gwich'in spoken. Text unavailable.*] Good morning. My name is Darius Elias. I'm the MLA for Vuntut Gwitchin riding in Old Crow. It's good to be in Carmacks again and I hope everyone is having a good start to their summer and I look forward to hearing your comments with regard to hydraulic fracture stimulation in our territory.

Ms. Moorcroft: Good morning, I'm Lois Moorcroft. I'm the MLA for Copperbelt South and I'm the NDP Official Opposition critic for Department of Justice, Highways and Public Works and Advanced Education. I'm very pleased to be here in Carmacks again and acknowledge we're on the Little Salmon Carmacks First Nation's traditional territory. I look forward to hearing from you regarding your views on hydraulic fracturing. Enjoy the morning. Thank you.

Mr. Tredger: Good morning, I'm Jim Tredger, the MLA for Mayo-Tatchun, which, of course, includes Carmacks. It is an honour and a pleasure to be here on Northern Tutchone traditional territory, and home of Little Salmon Carmacks in the Village of Carmacks. I look forward to hearing from you and look forward to your input and your thoughts on the risks and benefits of hydraulic fracturing to help us in our contemplation as we come toward recommendations to the territorial government.

Thank you very much for coming out. Mahsi' cho.

Mr. Silver: Hello. I'm Sandy Silver. I'm the MLA for Klondike and the Leader of the Yukon Liberal Party. Thanks for being here today and sharing with us of your time.

Chair: I would also like to introduce Allison Lloyd, to my right, who is the Clerk to the Committee; Dawn Brown, at our registration desk, who is assisting with logistics; and, of course, our sound 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. It's one of many hearings that we've held in Yukon communities, and we have several more to go. 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 is available at the registration desk. All 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 at this hearing. This time is allotted to hear from Yukoners. Now, in other communities, we've had to maintain a five-minute time slot for presenters. At this time, we have only two persons who wish to present, so we won't be holding to the five minutes.

Now, if you'd like to present your opinion to the Committee, it's helpful if you register at the table. However, it's not absolutely necessary. We can just have you come up to the table and give us your name then.

I want to welcome everybody here to this hearing in Carmacks. Please mute all your electronics.

I just want to make a further note that this hearing is being recorded and transcribed and everything you say will be on the public record and on our website. With that, we'll begin.

I would like to invite Tara Wheeler, please, to come to the table. Just start whenever you're ready.

Ms. Wheeler: I'm Tara Wheeler. I'm here on behalf of the Village of Carmacks. I'm a councillor. During our discussions, council expressed a desire to know more about the processes and further information on outcomes of processes, benefits and risks. We don't actually have an official position but we are steering toward the no-fracking. It has concerned us — what we've heard so far. The risks outweigh any benefits we've heard. I primarily came here to hear community input because I would like to know what anyone else in the community is thinking, but I am thinking from what we know right now, it's best not to have hydraulic fracturing in the Yukon.

Chair: Thank you very much. Robert Moar, please.

Mr. Moar: Good morning, my name is Robert Moore. I'm the director of lands for the Little Salmon Carmacks First Nation. The oil and gas department of Energy, Mines and Resources did presentations here in this community when they were considering the Whitehorse Trough exploration. One of the big concerns that I had was — especially in the visuals and the photographs — it was misleading to the public. They were showing all heli-portable operations and very little ground

disturbance and people walking on the ground and no bulldozers and no roads — or minimal roads — and so on. Having worked in oil patch myself, I can assure you that the cost savings of working on the ground and with road access are so great that that's the preferred way to go. Then they prefer to work in the winter when everything's frozen and you can drive over soft ground and frozen ground.

In regard to hydraulic fracturing — because of that presentation, I'm fairly concerned that the public is given a proper picture of what fracturing is all about nowadays. So my own work — I attended sort of conferences on this when I was a member of the Yukon Water Board. I've also looked at what's been happening in the States. I want to make sure that people understand what fracturing — the way fracturing is done nowadays is a bit different from how it was done 40 years ago. So nowadays they're using specialized rigs. There's a big rush to build the proper rigs. The new rigs have tracks on them — like, when they set up a big triple drilling rig, the tower is 120 feet of just drill stem alone on the triple. Then they — typically in fracturing, you drill a number of — at least everywhere else that I've looked at them — they drill a number of holes from each drill pad. They don't want to take the rig down and move it 10 feet. They literally drill in really tight grids on the drill pad. They don't want to take it down, do a drill move and set it up again. So the rigs — they're walking rigs now.

Nabors — they're a drilling company and they also make rigs — can't keep up with building these things for the Bakken field in Texas and everywhere else. So the rigs walk, if possible, so you don't have to — they drill a lot. Then they drill — they're doing horizontal drilling and so they drill down and then they kick out into a horizontal section and then they perforate, horizontally, the pipes, and they drill a big pattern — a horizontal array. Then they drill what they call generally — if the pay formation is thick enough, then they're going to drill what they call "stacked laterals." So you would come down, kick out horizontally, maybe go a kilometre or so, and then you would drill a little deeper and out a kilometre. So you have stacked horizontals in a big fan, going from — and then multiple holes from each drill pad. Then each drill pad is essentially connected in the — you're trying to connect your horizontal drilling pattern to the next drill pad's location. So maybe a couple kilometres away is the next drill pad and then a couple kilometres, the next — on a grid.

Then they fracture it all simultaneously. That's called "zipper fracturing." So zipper fracturing with these stacked laterals is not — we used to — when I first started working in the oil patch when I was a kid and I worked — I was a roughneck on drill rigs and then I took engineering and I became a seismic surveyor — like, optical surveyor — they'd frack just horizontal wells. But now we're doing stacked laterals and zipper fracturing for miles and miles and miles simultaneously.

So the potential — and then the other thing that's changed is now if the formation is economic — like, in terms of what you're going to recover — they're fracking at

shallower depths — fairly shallow depths. So they're fracking at shallow depths with these stacked laterals, zipper fracturing — so the ground disturbance is extensive over a large area. This is probably why you hear reports of minor earthquakes and stuff. They're counting on the closer-to-surface formations of rock to hold everything in place. But of course all rock is somewhat fractured and can leak to surface.

So I want — I think it's very important that the public understands, going forward, if they're going to do this, how extensive it is nowadays — so they can understand the possible impact generally to the groundwater regime and surface water regime. But also, we know from fracking accidents in Alberta that when the fracking solutions or saline water — like, they break down to groundwater formations that are highly salty. Then when these break out to surface due to the pressures, and they fracture and it comes up to surface, they've killed off hundreds and hundreds of acres of trees from this just salty water just leaking all over. So they know that.

Then an extremely important thing that has to be done is — in other jurisdictions, the oil companies were always allowed to go ahead and they started the fracking program before any baseline data is collected for the groundwater regime and the detailed geology. So it's very essential — like, if they're going to have a drill pad — that you drill at least for smaller water monitoring wells down a hundred or a couple hundred feet and get data on the existing groundwater quality. You also have to keep a detailed record of essentially the fingerprint of that water, chemically. Then you have to take the drilling — when they do the drilling, you have to collect all the data on that, because there's a chemical signature to every well and every petroleum product in the area, including the gases.

You need to get that chemical signature for all of the petroleum products and water products that are encountered as they drill the well so that you know what happened before — what the baseline condition was before — and you know exactly which of these wells and where the contamination came from so there's a link. My understanding of what has happened everywhere else is the oil companies go ahead, the farmers start having — you know, cattle are dying and all the people's — flames are shooting out of people's taps and stuff — and the oil companies says, "There's no linkage; there's no proof that we caused this," which is why this is so important that baseline data is collected and there's a way of referencing it to the oil or gas wells that are being drilled.

My main concern is that data gets collected in the Yukon and that a fair presentation of what this process is like comes in front of the public before any field is fractured because what is going on today is a lot more extensive than what was going on in 1980.

Thank you very much.

Chair: Thank you.

Would any other person like to address the Committee at this time? Chief Fairclough, please.

Mr. Fairclough: Eric Fairclough, Chief of Little Salmon Carmacks First Nation — political position, of course. First words that come to my mind to this Committee that comes to the community is “no fracking way” and you’ve probably heard those words many, many times. That’s polite words to you.

Let me say that our First Nation in the Yukon here — being the hub of the Yukon — is impacted by development tremendously — or the possibility of development — tremendously. I’m talking about the Casino mine for example — the \$2.6-billion project which will have a road the size of the Klondike Highway that you drove up, to this mine. The mine will be requiring 140 megawatts of power to be produced and what does Yukon produce right now. They will be shipping up LNG from Calgary at 20 trucks — approximately 20 trucks a day — and they will be passing through our territory into areas that most Yukoners have never seen, okay? That’s LNG. I’m sure that the Yukon government has an interest in producing it here so that there’s not such a far distance to truck it.

That’s just the gas itself so the potential for any type of accident to happen on that road is, I would say, great. CYFN, our First Nation, others in the territory have been lobbied again by companies to develop a railway system from down south to Alaska. It was presented at CYFN general assembly. I’ll tell you which way it goes. It’ll come from the Faro area where our traditional territory starts — so it will go all the way across the shores of Little Salmon Lake. It’ll come west toward Carmacks down the Campbell Highway and it’ll make a turn toward Frenchman Lake, Tatchun Lake areas. It will cross Tatchun Creek, go along the riverbank there, cross over the Five Finger Rapids — so they’ll hop the rocks over, basically, for convenience of building a bridge for a railway. It’ll continue to go north, northwest up the Tintina Trench which involves all — or quite a bit of the development in the Yukon. That’s a major project in itself. It will go from one end of our traditional territory, going all the way through to the other end.

On top of that, there will be a — I want to go through this whole thing if we got time. I’m not sure if you got time to listen to this — that there will be a spur line going from Carmacks down through Ta’an and Kwanlin Dun traditional territory, making a right turn and headed to Haines, Alaska to port. This railway will be carrying oil from the tar sands in Alberta going to port and many, many, many other things. It’s a two-track railway. It may never happen, okay? It may never happen, but I’m just telling you that, you know, these are potential things that could happen. There’s a tremendous lobby effort right now because obviously it doesn’t cost anybody anything and, you know, there might be some monetary benefits.

We have right now active discussion with Rockhaven up at Mount Nansen, which is another possible mine, which means increasing traffic. The Casino road would have, you know, maybe about 200 trucks a day heading down that road. Let’s take the Whitehorse Trough — which, you know,

interest in fracking would be, because there’s a lot of shale deposits here — gas deposits and shale. The majority of the Whitehorse Trough is within Little Salmon Carmacks traditional territory so we’re going to end up having to deal with that.

On top of that, we have decrease in caribou population, moose population. It becomes tougher to go out and gather for our traditional uses. Then you have the low salmon number for years and years and we’ve been cutting back on that and dealing with governments in, you know, what we feel should be the safest route to go when it comes to things like rip-rap on the Tatchun Creek bridge.

Now you want input from the community about hydraulic fracturing. It seems to me that public opinion is not for support of any type of hydraulic fracturing in the Yukon. You may hear of some, but I don’t think there is a whole lot of it there. That’s a public opinion. In my view, when the Yukon Party government does not like public opinions, they throw these things into committees for committees to deal with. You’ll find these committees going into the communities to hear the people out but I don’t think that, you know, really in the end, the Yukon government decision would even follow the Committee’s rules.

Let’s take a court case, for example, that’s happening right now with the Peel watershed, which was the Peel watershed planning committee recommendations. I don’t need to go very far into that. The reason why I’m saying this is I’ve got personal experience in this too. When the Government of Yukon did not like public opinion on, say, whistle-blower, they threw it into a committee and I was in that committee for over 10 years. It’s a stalling tactic in some cases and people do notice that. So I just want to raise it — I just want to raise the fact that we understand it — where things come from at times.

You just heard from Robert Moar, our lands director. I would think that, you know, with his words here today that the First Nation in the lands department at least have somewhat of an understanding of the impacts that hydraulic fracturing would have in our traditional territory. That concerns us.

Now let me go back a little bit into the land claim negotiation. We selected category A, category B lands but we had a tremendous interest in the Nordenskiöld Valley, for example. Ducks Unlimited haven’t had a map notation there. We selected a portion of land for a special management area and because even at that point, there was mistrust in government, there was another land selection as settlement land on top of the SMA. That valley, as you drive back to Whitehorse, is a massive valley. It has a tremendous amount of wildlife and birds and so on and was considered the breadbasket for Little Salmon Carmacks First Nation people. In other words, any time of the year, you can go into that valley and gather something and basically live.

There’s tremendous interest on our part to ensure that as much as possible, we keep things in place for the future.

LSCFN is not opposed to development. We’re working with developers right now on a number of fronts, but we will

continue to voice our position and keep a close eye on the environment to address issues of wildlife and water and so on. That's why you hear for a long time the First Nations have been taking a number of positions, whether it's in the public or the media or in court on matters of this magnitude. That'll be our continued position.

I would say that the majority of our citizens — from what they see on TV, from what they've been hearing on hydraulic fracturing — feel that it is a tremendous negative impact to the land, to the water in the future, and really have not heard any good positive stuff that would come out of hydraulic fracturing other than, you know, you would see increased activity and we would be producing gas out of that whole process.

Where it goes, who benefits from it — nothing like that has ever come forward to us. The Yukon government — we have had discussions with them on their priorities. Even at the Yukon Forum, this was never a priority raised by the Yukon government — by the Premier — and have never really asked the leaders in having even frank discussions on general meetings that we were having — informal discussions, I should say — with the leaders about what we have been thinking on this whole issue.

To me, it's not — publicly, it's not a high priority on the Yukon government's part but I hope that there's no hidden agenda that's there. That's my fear. We need to be clear — and we've said this over and over — with the information and direction that we as a First Nation is heading and Yukon government also. At this point, we're dealing with trying to give you some information on whether we support it, what parts of the hydraulic fracturing we're worried about or don't understand.

I think our position is pretty clear that we're dealing with so much right now, and it's not the position of any leaders in our First Nation to go out and make these decisions in absence of direction from the citizens. So there's processes laid out in our final agreement — morally, as people — to ensure that our citizens are well-informed before making and taking their direction when it comes to development.

So — I don't know where, you know — the question would be: What's the Committee going to do with this information, other than report back to the Legislature? Because this is my understanding of what it is, and I think it's pretty accurate — is when a committee is formed, of course the control is in government hands. You're always outnumbered, whether it's boards and committees or whatever — you're outnumbered, so you're steered by the governing party. When a vote ever comes down to accepting or giving direction in the Legislature, it's majority wins and, right now, Yukon Party is majority and they could be passing things — even though they only got 40 percent of the public vote.

So, that's my short little spiel to you. Thanks for listening.

Chair: Thank you very much. Does any other person wish to present to the Committee at this time?

I'm going to suggest, then, we take a 15-minute recess, and maybe once you start chatting among yourselves, you might change your mind on that and we would be happy to reconvene in about 15 minutes and see if there's anything further. Thank you.

Please, lots of food — help yourself.

Recess

Chair: And we're back. We don't have any new names submitted for speakers, so I'm just going to ask the question if anybody would like to address the Committee at this time.

Unidentified Speaker: (inaudible)

Chair: Yes, you may. Please state your name for the record.

Mr. Fairclough: Eric Fairclough, Chief, Little Salmon Carmacks First Nation. I just wanted to add one more information for the Committee. We had a General Assembly early in June and passed a resolution not supporting hydraulic fracturing in our traditional territory — just for your information.

Chair: Thank you. Anybody else? Don't be shy. We would love to hear from you.

Unidentified Speaker: (inaudible)

Chair: Mr. Elias has requested a copy of the resolution passed by the First Nation and the Chief has committed to provide that to the Committee. That would be very nice — thank you.

Ms. Gage: Hi, my name is Carla Gage. I've lived here my whole life. I think a lot of us live here because it is so clean and fresh and beautiful and because of the water. It's really important. I think fracking would just ruin the environment, the water. I've seen enough — I've been to a few of the presentations, I've seen enough on TV, to know that I would be completely devastated to see them frack here — anywhere in the Yukon, actually. I just wanted to say that. I've never been so proud to be from this community. Thank you.

Chair: Thank you. I would like to let people know that the Committee will take input from almost any form of media. We do have a form on the website where you can provide your comments. We'll take an e-mail or a letter — any way you wish to communicate with the Committee would be just fine with us. Thank you. The contact information is available at the registration desk.

Now it has been suggested that the Committee wait until sometime during lunch hour for any folks who might be coming by at lunchtime, so I think then we could just recess until we can gauge further participation, if that's all right with folks?

Unidentified Speaker: (inaudible)

Chair: Yeah, you know, if somebody comes in the door at five past 12, we'll reconvene. How's that?

Unidentified Speaker: (inaudible)

Chair: We'll hang around for some time though, so please eat lots.

Recess

Chair: Okay, I'd like to reconvene the Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing. We've been taking a recess, just giving folks an opportunity to come in at lunchtime. So I would like to invite Bev Brown up please, to the microphone.

Ms. Brown: Hi. Thanks for coming to Carmacks. I have two comments about fracking. I think Kendell pointed to a third issue of, you know, just the lack of information of the risks and benefits. It's an issue in itself. But I've worked in fish and wildlife and lands for 14 years, and I'm a very strong advocate for land use planning, and our obligations under the agreement to have that exercise completed.

Now, with land use planning, ultimately whether a plan is accepted or rejected is not a strong concern for me, as much as the value of the exercise. So that comprehensive look at the values on the land, collecting all the information to have a comprehensive understanding of what we value here, to me, is imperative prior to large-scale industrial development.

That's my first concern — a message to the politicians to say that that exercise of doing it, whether accepted or rejected, to me doesn't matter; it's just a very valuable — getting the top-notch experts in Yukon that know what they're doing and gathering the community together. Where are the values on this land?

So the second part was, working for the renewable resource council in Carmacks, what came across the desk was the opportunity to comment on Yukon government's proposed opening of the Whitehorse Trough for oil and gas development. So I spent a considerable amount of time preparing the response to that. Again, it's running around, looking for all the knowledge you can on what are the values that might be potentially impacted for opening the Whitehorse Trough.

And then, at the end of the day, it wasn't Yukon government saying, "We don't have the internal capacity to deal with this," or "We're not prepared to do this." What did Yukon government say? They said, "We have heard the people — that nobody wants to go this step in opening the Whitehorse Trough."

So I'm a little bit confused. With that clear message from the people, why would they take this step in trying to do the fracking? I think that's about it. Okay.

Chair: Thank you. Can we interest you in addressing the Committee?

Unidentified Speaker: (inaudible)

Chair: Dawn has just handed —

Unidentified Speaker: (inaudible)

Chair: Dawn has just handed you a progress report on the work to date of the Committee, at least in part. It's fairly summarized. We've been at this for a year and a half, and we are — I guess you could say — moving toward now preparing a report for the Legislature. Just to let you know that you can comment in any form you wish. You can go on-line and send

a form that's on-line; you can send an e-mail to the Committee; you can write a letter to the Committee. All forms of correspondence are acceptable, of course.

Unidentified Speaker: (inaudible)

Chair: We are mandated to give a report to the Legislature by the end of the fall sitting, which is generally sometime mid- December, so I would presume that we'll be taking comments at least until after the Whitehorse public hearings, which are going to be the end of September.

And if you ever have any questions, by all means send the Committee an e-mail and we'll see what we can do. Having said that, we have clearly run out of speakers. I would like to adjourn this session of the select committee in fabulous downtown Carmacks. Thank you.

The Committee adjourned at 12:22 p.m.