

**JOINT REVIEW PANEL FOR THE ENBRIDGE  
NORTHERN GATEWAY PROJECT  
COMMISSION D'EXAMEN CONJOINT DU PROJET  
ENBRIDGE NORTHERN GATEWAY**



**Hearing Order OH-4-2011  
Ordonnance d'audience OH-4-2011**

**Northern Gateway Pipelines Inc.  
Enbridge Northern Gateway Project  
Application of 27 May 2010**

**Demande de Northern Gateway Pipelines Inc.  
du 27 mai 2010 relative au projet  
Enbridge Northern Gateway**

**VOLUME 121**

**Hearing held at  
Audience tenue à**

**Delta Victoria Ocean Pointe Hotel & Spa  
45 Songhees Road  
Victoria, British Columbia**

**January 9, 2013  
Le 9 janvier 2013**

**International Reporting Inc.  
Ottawa, Ontario  
(613) 748-6043**

**Canada**

© Her Majesty the Queen in Right of Canada 2013  
as represented by the Minister of the Environment  
and the National Energy Board

This publication is the recorded verbatim transcript  
and, as such, is taped and transcribed in either of the  
official languages, depending on the languages  
spoken by the participant at the public hearing.

Printed in Canada

© Sa Majesté du Chef du Canada 2013  
représentée par le Ministre de l'Environnement et  
l'Office national de l'énergie

Cette publication est un compte rendu textuel des  
délibérations et, en tant que tel, est enregistrée et  
transcrite dans l'une ou l'autre des deux langues  
officielles, compte tenu de la langue utilisée par le  
participant à l'audience publique.

Imprimé au Canada

**HEARING /AUDIENCE**

**OH-4-2011**

IN THE MATTER OF an application filed by the Northern Gateway Pipelines Limited Partnership for a Certificate of Public Convenience and Necessity pursuant to section 52 of the *National Energy Board Act*, for authorization to construct and operate the Enbridge Northern Gateway Project.

**HEARING LOCATION/LIEU DE L'AUDIENCE**

Hearing held in Victoria (British Columbia), Wednesday, January 9, 2013  
Audience tenue à Victoria (Colombie-Britannique), mercredi, le 9 janvier 2013

**JOINT REVIEW PANEL/LA COMMISSION D'EXAMEN CONJOINT**

S. Leggett	Chairperson/Présidente
K. Bateman	Member/Membre
H. Matthews	Member/Membre

## ORAL STATEMENTS/EXPOSÉS ORAUX

Yvonne Haist  
Debra Barkman  
Amy Collins  
Janet Ray  
Katherine Cook  
Bruce Dean  
Steeve Deschenes  
Emma Gilchrist  
Alan Hedley  
Michael Holt  
Barbara Huntington  
Jean Jordan  
Jane Kilthei  
Bruce Mackenzie  
Paul Manly  
Tom Martin  
Renee Mikaloff  
William Mikaloff  
Judith Rayburn  
Genevieve Singleton  
Sharleen Thompson  
Caitlyn Vernon  
Sarah Verstegen  
Don Vipond  
Michael Woodward

Jane P. Brett  
Bruce Carter  
Anne-Marie Daniel  
Garry Fletcher  
Tracy Ferreira  
Anne Hansen  
Derek Harnanansingh  
Nitya Harris  
Ralph Lapp  
Susan MacDonald  
Jac-Lyn Mickelson  
Patricia Molchan  
Lorraine Nygaard  
David Slade  
Robert F. Smith  
Robert (Bob) Sommerhalder  
Maria Squance  
Leah Thorpe  
Glenys Verhulst

## TABLE OF CONTENTS/TABLE DES MATIÈRES

(i)

<b>Description</b>	<b>Paragraph No./No. de paragraphe</b>
Opening remarks by the Chairperson	21160
Oral statement by Yvonne Haist	21162
Oral statement by Judith Rayburn	21198
Oral statement by Debra Barkman	21222
Oral statement by Bruce Dean	21258
Oral statement by Amy Collins	21293
Oral statement by Janet Ray	21304
Oral statement by Emma Gilchrist	21338
Oral statement by Katherine Cook	21372
Oral statement by Steeve Deschenes	21406
Oral statement by Alan Hedley	21433
Oral statement by Michael Holt	21451
Oral statement by Barbara Huntington	21481
Oral statement by Jean Jordan	21495
Oral statement by Jane Kilthei	21525
Oral statement by Bruce Mackenzie	21551
Oral statement by Paul Manly	21576
Oral statement by Tom Martin	21602
Oral statement by Sharleen Thompson	21623
Oral statement by Renee Mikaloff	21650
Oral statement by William Mikaloff	21680
Oral statement by Genevieve Singleton	21703
Oral statement by Caitlyn Vernon	21743
Oral statement by Sarah Verstegen	21787
Oral statement by Don Vipond	21818
Oral statement by Michael Woodward	21853
Oral statement by Bruce Carter	21894
Oral statement by Jane P. Brett	21928
Oral statement by Tracy Ferreira	21953
Oral statement by Anne Hansen	21961
Oral statement by Garry Fletcher	21973
Oral statement by Anne-Marie Daniel	22017
Oral statement by Nitya Harris	22047
Oral statement by Ralph Lapp	22078
Oral statement by Derek Harnanansingh	22098
Oral statement by Jac-Lyn Mickelson	22139
Oral statement by Susan MacDonald	22162
Oral statement by Patricia Molchan	22187
Oral statement by Lorraine Nygaard	22214
Oral statement by David Slade	22249

## TABLE OF CONTENTS/TABLE DES MATIÈRES

(ii)

<b>Description</b>	<b>Paragraph No./No. de paragraphe</b>
Oral statement by Robert F. Smith	22288
Oral statement by Leah Thorpe	22322
Oral statement by Maria Squance	22354
Oral statement by Robert (Bob) Sommerhalder	22380
Oral statement by Glenys Verhulst	22405

--- Upon commencing at 1:02 p.m./L'audience débute à 13h02

21160.           **THE CHAIRPERSON:** Good afternoon, everyone. We're continuing to hear the oral statements in Victoria this afternoon.

21161.           And, Ms. Haist, thank you for being with us today and please begin your oral statement when you're ready.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. YVONNE HAIST:**

21162.           **MS. YVONNE HAIST:** Thank you. I'd like to thank you very much for the opportunity to speak. It feels like a big honour to be here today. My name's Yvonne Haist and I work as a senior instructor at the University of Victoria.

21163.           And I'm here -- I stand here, actually, representing a collection of friends -- David Greig, Susan Farling, Susan Tuchie, Ava Crystal, Anne Jacob, Stan Tomotal, Alison and Jim Prentice and Anke van Leuven.

21164.           **THE CHAIRPERSON:** Ms. Haist, I just let you know that the whole purpose of oral statements is to hear your personal views ---

21165.           **MS. YVONNE HAIST:** Yes.

21166.           **THE CHAIRPERSON:** --- and so ---

21167.           **MS. YVONNE HAIST:** Yes.

21168.           **THE CHAIRPERSON:** --- that's what we're interested in.

21169.           **MS. YVONNE HAIST:** This will be it.

21170.           **THE CHAIRPERSON:** Thank you.

21171.           **MS. YVONNE HAIST:** Yes. So I speak here as well, as a voice for the earth, I speak here for those who can't speak and I speak here also for my children's children's children in solidarity with the land.

21172.           And I'd like to start by acknowledging the territory of the Lekwungen speaking peoples. My ancestry is German -- first generation Canadian settler. So

**Oral statements**  
**Exposés oraux**

I've been a guest on Coast Salish and Strait Salish territory for most of my life.

21173.           Why this project matters to me personally: I have given a lot of thought to my relationship to the land and I thought I'd just share a wee story with you.
21174.           For the past two summers I've had this amazing opportunity to paddle my kayak with a group of friends through the Broken Islands which is part of the traditional territory of the Nuu-chah-nulth speaking people. And this paddle through this mecca of islands, I think afforded, for me, a kind of relationship with these pristine lands that I hadn't ever really experienced.
21175.           It was such an opportunity to be in deep communion with the gulls, with the whales, with the dolphins, with the bears along the shoreline. And one of the things about that kind of experience is that it enables us to be totally present and totally in the moment with the preciousness of our ecosystem.
21176.           And you know, I had that moment, which I'm sure all of you can relate to, where we have a sense of ourselves as not being, kind of separate. I image that all of you, as Members of the Panel and the Enbridge representatives, can really recall precious moments of deep connection to the land.
21177.           So I just invite you to take a moment and just to think of a place in nature, a place in the wild that you just love. And just kind of notice what it feels like to put yourself in that place. So I think what a gift it is for us to be able to sit in the silence of the majestic beauty and to just truly drink in what it is that our natural world offers.
21178.           And I've heard it said before that, I think we're so blessed on the west coast of British Columbia to live in one of the most complex and beautiful ecosystems in the world. I think some of my experiences on the coast can't ever be replicated in any way.
21179.           One of the things that happened when I was on this paddle trip is we stayed at a lodge. And there was hardly anybody there. It was a bit of a surprise, like how could there not be anybody here hardly in this place that's so remarkable. And the new lodge owner said, "You know, I've really envisioned this as a much busier operation because I really recognize how incredible this land is here".



**Oral statements**  
**Exposés oraux**

21180. And I know, as somebody who'd had a chance to paddle this territory, how much more grounded and connected to myself and ourselves that we all felt. So there was so many teachings from the land. And so when this individual talked about, you know, let's build up, kind of tourism here, I thought, yes, I really -- you know, that makes a lot of sense.
21181. And so this brings me to my thoughts about the potential for land like this to, in some way, be really impacted by a potential oil spill. And I've read that Enbridge has taken steps to really address the potential for such a spill and I know that there's been a lot of concern about this. But I also understand that cleaning up the bitumen oil spills in the ocean presents a significant challenge because the bitumen is heavier than water and it sinks.
21182. So while I have no way in my limited knowledge of under -- you know, being able to address the precautions that have been planned, I would like you to just consider this. I think that the tourism industry surpasses, really in dollar value, maybe the projected value to B.C. of the pipeline and tanker traffic.
21183. And you know, yet the latter has the potential to ruin the former. And I think yes, we need industry, we possibly need development in northern B.C., but you know, I question what there is to be gained from exploiting raw untreated product.
21184. And I'd also wanted to take note that there's more than 130 First Nations in western Canada that have stated opposition to this project and they've made it really clear how critical it is to uphold ancestral laws, title rights and responsibilities.
21185. So as my team -- I stand on behalf of Yvonne's group for tomorrow -- I just -- you know, we pose these questions: So in this project have we taken into account Aboriginal title and Treaty rights? What is it that we're doing to ensure that we're maintaining the integrity of the socio-ecological system? And then also, how do we take into account our responsibility through the generations inter-generationally?
21186. I believe, very strongly, that protection of Mother Earth is all of humanity's responsibility and it's incumbent on all of us to look at our own heritages and look at our ancestral heritage to the land. So I invite all of you here today to really think about where you came from and how your own ancestral history reflected a connection to the land. And to think about how we can

**Oral statements**  
**Exposés oraux**

- maintain a deep reverence for the earth, sort of regardless of what it is that we're doing.
21187. I wanted to end with just a couple of thoughts. I understand that the intention of this project -- the decision will be made based on, you know, whether it's in the national, public interest.
21188. And to this end, I just wanted to pose these questions: Who are we defining as national, who gets included as national? What nations are included and what nations might be excluded? To what degree does this include, you know, really serious consultations with our First Peoples which are separate nations? Who gets included in public? And when we talk about interest, do we include all of our children's children? So whose interest do we take into account?
21189. And just in summary, I would like to say that I think what we need to do at this point in time is to really wake up and use every bit of wisdom, every bit of common sense, all of our creativity towards sustainability and stewardship of clean air and clean water.
21190. Thank you so much.
21191. **MEMBER MATTHEWS:** Great. Thanks a lot, Ms. Haist.
21192. Good afternoon, Ms. Rayburn.
21193. **MS. JUDITH RAYBURN:** Afternoon.
21194. **MEMBER MATTHEWS:** Beautiful day out there.
21195. **MS. JUDITH RAYBURN:** Yes.
21196. **MEMBER MATTHEWS:** Okay, welcome. So please go ahead and share your views with the Panel.
21197. **MS. JUDITH RAYBURN:** It certainly is.
- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. JUDITH RAYBURN:**
21198. **MS. JUDITH RAYBURN:** Good afternoon, Members of the Panel and ladies and gentlemen. First, allow me to salute the Songhees and Esquimalt

Nations in whose traditional territories we are meeting now.

21199. As a Canadian, I am very glad to have the opportunity to outline to you my concerns about the Enbridge Northern Gateway pipeline project.

21200. As a retired senior citizen, pensioner trying to make ends meet, I liken the management of my country, Canada, and British Columbia to the running of my own household. For example, when I hire companies to undertake work for me, money out of my pension, I first do some research about those firms. If I discover that a certain firm has had a number of complaints, I steer clear of doing business with that company.

21201. In like manner, when my government is undertaking business agreements at the expense of and for the benefit of Canadians and when my research shows that the company has a clear record of doing careless, damaging work for other clients, my democratic duty as a responsible Canadian is to advise my government not to hire this unfit, damaging company, in this case Enbridge.

21202. Members of the Joint Review Panel, my purpose here today is to express my opinion to the Panel that the Enbridge Incorporated's Northern Gateway pipeline not be built, that Enbridge Incorporated is not to be trusted to build a sound, non-polluting pipeline across the many rivers and pristine wildlife habitats of the proposed route through British Columbia to Kitimat, B.C.

21203. In my research regarding the many questions related to Enbridge's Northern Gateway pipeline project, I learned a great deal. Of particular interest were the points of view of experts and other concerned Canadians and their reasons why the Enbridge Northern Gateway pipeline project should not be built. Here I'd like to refer to the views of British Columbia's Environment Minister, Terry Lake, who has said in the Times-Colonist of October 19<sup>th</sup>, 2012, and I quote:

*"Enbridge hasn't yet determined how accessible parts of the pipeline would be in the event of a spill, and that it won't have a spill response plan finalized until six months before [the] operations begin."*

21204. Mr. Lake is quoted as saying, and I quote:

*"The company needs to show British Columbians that they*

*have practical solutions to the environmental risks and concerns that have been raised. So far, they have not done that."*

21205. End of quote.

21206. Then there's the view of Deborah Hersman, head of the U.S. National Transportation Safety Board, reporting on Enbridge's Kalamazoo River pipeline leak in 2010. She has been quoted in the Times-Colonist of July 13, 2012 as saying, and I quote:

*"It was Enbridge's failure as a company to properly maintain what it [Enbridge] knew to be an aging pipeline. Yet, for five years they [Enbridge] did nothing to address the corrosion or cracking at the rupture site - and the problem festered."*

21207. Echoing the views of B.C.'s Environment Minister Lake is Graham Thomson of the Edmonton Journal, who is quoted in the Times-Colonist of July 13, 2012 saying, and I quote:

*"Enbridge has to explain exactly and in great detail how it [Enbridge] has improved its system of inspecting and operating its pipelines. The governments of Alberta and Canada have to explain how regulators will keep an eye on the regulated."*

21208. End of quote.

21209. Next, and very importantly, the former Chief Executive of the Insurance Corporation of British Columbia, Robyn Allan, is quoted in the Times-Colonist of July 6, 2012 speaking of Enbridge's business model. I quote:

*"The purpose of the business structure Enbridge has chosen at a limited partnership is to limit the exposure investors have for liabilities of the company, not to make good on a catastrophic spill event. Enbridge is claiming something it cannot guarantee the limited partnership will deliver." (As read)*

21210. End of quote.

21211. Also, in the Tyee on the -- on the online news of June 5, 2012, Ms. Allan says, and I quote:

*"There is no reason to believe Enbridge would be directly responsible for the cost of any spill based on the limited partnership structure. This structure allows profits to flow to Enbridge, [...] not spill liabilities."*

21212. End of quote.

21213. Ms. Allan's strong points against Enbridge suggest that the economic viability of the company would be compromised in the case of a catastrophic spill, and Ms. Allan is an economist. It is not clear to me which -- which company and/or affiliate would, in fact, be legally liable for clean-up costs. I and other taxpayers of B.C. do not want to be stuck paying Enbridge's clean-up costs.

21214. Moreover, here in my community of Victoria, British Columbia, I have not been able to find one person to defend Enbridge. Even members of the financial business sector here in Victoria are withdrawing their support from Enbridge. I'm referring to Vancity's divestment of Enbridge shares from its investment funds. Reported in the Times-Colonist August 24<sup>th</sup>, 2012, I quote:

*"Vancity Investment Management said the pipeline company's "Keystone Kops" handling of a massive 2010 oil spill in Michigan suggests it [Enbridge] no longer meets the credit union's criteria for socially responsible investments."*

21215. End of quote.

21216. Finally, and surely the most damning failure of the Enbridge Corporation, is the company's inability to establish a business agreement with the Haisla and other Aboriginal nations giving the company permission to build a pipeline on native territories.

21217. Ladies and gentlemen, the age of hostile takeover of territories is long since gone in Canada. Trampling over native rights is not the way business is done in democratic Canada, or is it? I support the Haisla Nation and other First Nations in their considered decisions not to allow the Enbridge Corporation to build its pipelines through their traditional territories.

**Oral statements**  
**Exposés oraux**

21218. In conclusion, I humbly ask the Panel to record my total rejection of the Enbridge Corporation and its Northern Gateway Pipeline Project.

21219. Thank you for listening.

21220. **MEMBER BATEMAN:** Ms. Barkman, thank you for coming today.

21221. Please begin your presentation.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. DEBRA BARKMAN:**

21222. **MS. DEBRA BARKMAN:** Thank you to my fellow presenters. That was great.

21223. Good day. I'm Debra Barkman. I would like to start by thanking the local Coast Salish people for letting me speak on their territories. I'm against the proposed Enbridge pipeline and the oil tanker traffic on the northwest coast of British Columbia.

21224. I was reminded the other day I'm also speaking for those thousands who can't be here today; the people and the wildlife. I lived up north for 30 years, until almost five years ago, just north of where the proposed pipeline is to go, outside of Smithers. Gitxsan Wet'suwet'en territory. I will return there this summer to visit.

21225. I did social work there. I understand how people's environment, that they live and work in affects their quality of life. When I moved there 35 years ago I thought it was for two or three years. The north has a very inclusive sense of community.

21226. I have already seen an oil spill. I was on the Louisiana Gulf Coast the winter after the BP, British Petroleum spill. I saw the 30-foot sand beaches with foot high rows of black, gooey oil that had been scraped up. That went on for miles lined up next to the highway. I saw the murky sludge-filled ocean. The oil hanging just below the surface mixed with the poisonous coagulants that had been added to oil to congeal it.

21227. On the other side of the highway was the bayou and the grasslands, some of which are below sea level. Then we came upon a tree of a dozen pelicans roosted in it. And I thought how can they ever find anything to eat in that mess.

**Oral statements**  
**Exposés oraux**

- No plant life will be able to grow below that poisonous mass and no marine life will be able to live or navigate in that goop.
21228. I heard people there say once it gets into the bayou we will never get rid of it. The next winter storm will carry that oil across the beach and highway into the bayou. There were no fishing boats out anywhere and no local fish to eat. I love seafood. And in Lafayette the night before there was no local seafood in the Cajun restaurant we went to. And it made me remember the heaping plates of Gulf Coast shrimp I had in New Orleans 30 years before.
21229. Then I thought of the northwest coast, of all of the beauty I've seen there. And there is not enough money to consider endangering that country and wildlife.
21230. The oil at Valdez is still there 20 years later. Just turn over a rock on the beach. Only 15 percent of the oil from that spill was recovered, and the proposed tankers are 10 times the size of the Valdez. I have travelled the northwest part of British Columbia visiting friends and working.
21231. I've seen the richness of the environmental diversity that would be lost if this pipeline goes through. I've seen the grand canyon of the Stickine at Telegraph Creek up by the Yukon border and seen the tall town smoke houses full of fish for the winter. I've been to the Skeena headwaters, the Spatsizi area, the Serengeti of northwest B.C., all dependent on the healthy marine environment downstream.
21232. I've been to Haida Gwaii; known to some as the Queen Charlotte Islands. I have walked the beaches for miles there and understand why these areas are protected and sacred to many. I have seen the young men bring in huge halibut, almost bigger than them and the boat, to feed their friends and family because that's what folks do there. I have sat on the banks of the Skeena River where the saltwater meets the freshwater in March and seen 500 eagles resting in the trees along the river from following the eulachon up the northwest coast and the gulls circle over the schools of fish.
21233. I want our grandchildren's grandchildren to walk in the footprints of a grizzly bear in the Khutzeymateen Valley north of Prince Rupert that have been there for millennium. I want them to be able to walk by the ocean as I do and see the sea lion and the killer whales; to be able to sit on a beach and watch a huge whale feed for hours, so close in I was scared it was going to beach itself; to be

**Oral statements**  
**Exposés oraux**

- able to go howl with the wolves just outside their door, across the creek on a starlit winter night; to be able to wake up in the morning to see the mama moose have brought their babies to snuggle up against the house on three sides at 30 below, and to watch them feed in their backyard.
21234. All are dependent on this environment remaining intact. I know thousands of people who live in the north whose jobs depend on a healthy ecosystem there; 30,000 jobs would be lost, \$3 billion in lost income, endangered from one spill. These people depend on that environment to put food on the table and fill the freezer for the winter -- a six-month winter. Not only the First Nations people.
21235. We all know the cost of food is going up. Good, clean, organic, wild food that grows there. Most people in the world can only dream of such a way of life. People come from all over the world to beautiful British Columbia. Three of the last wild salmon-bearing rivers are in the vicinity of the proposed pipeline, the Skeena, the Kispiox, the Bulkley. These are world-famous rivers in fishing circles. There are many more that would be endangered by an oil spill, the Dean just north of Bella Coola, the fishery off Haida Gwaii and all down the west coast.
21236. Do we want to see the west coast wild salmon fishery go the way of the east coast cod fishery? The collapse of a resource that was thought would be there forever. This proposed pipeline would cross over 700 rivers and endanger them all and everyone and everything dependent on them.
21237. There are many more reasons British Columbians have stood up against oil tankers off the coast. These are some of the most dangerous waters in the world. Just look at the news the last while, earthquakes, tsunami warnings around Haida Gwaii, boats almost going aground in 40-foot waves.
21238. I was on a hovercraft ferry crossing the English Channel many years ago, another notorious waterway. I was on the first boat after the channel ferries had been shut down for 24 hours. This was a large boat that had semi's on it, and remember visibly looking up from the bottom of one of those 40-foot waves. The thought of an oil tanker three times the size of a football field being out in that weather is terrifying.
21239. I've been on the ferry from Haida Gwaii to Rupert when the weather was so rough that anybody -- anyone who wasn't throwing up was trying to find a place out of the way to lay down on the floor in the middle of the boat so they



- didn't throw up.
21240. I've been on the beaches on the east side of Haida Gwaii when a southwest wind blew up suddenly with no warning and everyone was scrambling for their lives so they didn't get blown off the beach. And I think of the ferry that went down at the mouth of the Douglas Channel, the Channel where the tankers would attempt to navigate all the missing islands, the only place in the world where the Kermode bear lives.
21241. I had a German tourist in Vancouver quizzing me on the Kermode bear one day. The First Nations folks who rescued those folks from that ferry are already feeling the impact from the oil from that sunken ferry still there.
21242. **MEMBER BATEMAN:** Ms. Barkman, I'm sorry, I'm going to just interrupt you. You are a minute over your time.
21243. **MS. DEBRA BARKMAN:** Over 10 minutes?
21244. **MEMBER BATEMAN:** Yes. And I see that you have a number of pages ---
21245. **MS. DEBRA BARKMAN:** I'm just about done.
21246. **MEMBER BATEMAN:** Okay. So if you could ---
21247. **MS. DEBRA BARKMAN:** Yeah.
21248. **MEMBER BATEMAN:** --- rather than complete all of your reading, just move directly to one or two summary statements that you feel cover what you have remaining.
21249. **MS. DEBRA BARKMAN:** We are talking about endangering over 400 miles, minimum, down the west coast of B.C. based on tidal and current charts. Seventy (70) percent of British Columbians do not want this pipeline or these tankers on the north coast.
21250. **MEMBER BATEMAN:** Ms. Barkman, I'm going to interrupt you again. I have the sense that you're going to continue reading, but can I invite you simply to make a final sentence.

**Oral statements**  
**Exposés oraux**

21251.           **MS. DEBRA BARKMAN:** Okay. If you really think the environment is less important than the economy, try holding your breath while you count your money.

21252.           **MEMBER BATEMAN:** Thank you.

21253.           **MS. DEBRA BARKMAN:** Thank you.

21254.           **THE CHAIRPERSON:** Thank you to each of you for your oral statements this afternoon.

--- (A short pause/Courte pause)

21255.           **THE CHAIRPERSON:** Good afternoon.

21256.           Mr. Dean, please begin with your statement when you're ready.

21257.           And I'd just let everybody know along the way that there's no need for you to stay after you've made your oral statement. If you want to leave, please feel free to.

--- **ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. BRUCE DEAN:**

21258.           **MR. BRUCE DEAN:** Okay, good afternoon. My name is Bruce Dean. I'm a single disabled father, student, artist, writer and photographer with an extensive family background in the oil field industry from Alberta and Texas primarily.

21259.           Many years ago, our family invented continuous sucker rod and all of the related servicing equipment known as COROD Manufacturing back then. I don't know if you know, sucker rod is that rod that goes up and down the well, and it's usually in 25-foot lengths, I think. I'm the one who's a non-oil member of my family. And my family figured out how to make it long and in spools and stuff like that.

21260.           So as time passed, the oil industry aspect of our business focus moved toward one of the weak links in the pursuit of fossil fuels, disasters. There proved to be much money in attempts to prevent equipment failures that proved costly to those investing in fossil fuels. Back then, there was an even less concern for the environmental impact than there was today -- or there is today. It was more

- concern for financial loss that motivated the non-destructive testing.
21261. In particular, our business focused upon flaw detection through non-destructive testing of steel products specializing in the real-time production line flaw detection of tubular products because pipelines fail.
21262. Because pipelines fail is one of the reasons I'm here. I'm also here because I'm an outdoor enthusiast. Often I'm restricted to access to nature because of over-priced, inadequate parks and green spaces that now require reservations and significant expendable income to visit.
21263. Often I'm restricted to access to nature because of rules that greatly limit access for mountain bikes, yet some greedheads with no concern for the environment want to thrust a pipeline just waiting to fail through our entire province and then cruise potential environmental disasters called supertankers through our waters.
21264. How does that work? Supertanker no problem, mountain bike no? There's something very wrong with our priorities here, and our perspective.
21265. Another reason why I'm here is because I'm a sailor. Sailing World magazine archives have a feature article about me sailing in our renowned local waters on my beach class catamaran. I know that even the best sailor could hit the rocks buried beneath the surface or misjudge the tides and currents.
21266. Supertankers cruising through our world famous sailing waters and islands is a fool's game for profit in the name of fossil fuels, nothing else.
21267. Restricting my access to Mother Nature because my mountain bike's knobby tires might disturb some tree routes but allowing pipelines and supertankers through our woods and waters; I don't understand how that works. It's corporations' desires ahead of individual needs. It's corporations' desires ahead of individual needs. It's corporations' desires ahead of environmental needs.
21268. It's akin to the restrictions upon my ability to even fly fish while corporations profit from and deplete the ocean's bounty. Again, a mismatch there. I should be able to fish year round and the corporations should have to be -- go without fishing if the fish stocks are low, not the other way around. That's just silliness.

**Oral statements**  
**Exposés oraux**

21269. Another reason I'm here is I'm an environmentalist and somehow, on my below poverty line disability income and living in pain 24/7, I was able to develop an environmentally friendly vehicle mobility aid for myself. If you want, you can read about it in the current issue of Momentum magazine, issue 59.
21270. So what is the problem with my government and our corporations? Why am I leading them in the charge to save our environment? I'm just a broke, gimped-up single dad.
21271. This project will have a negative impact on me because it signifies a continued focus upon fossil fuels, obviously misguided to even the most clueless. This project will have a negative impact on me because, as a Canadian, it's embarrassing to be associated with a country with such destructive views on the environment. It's embarrassing to be associated with a country that continues to treat our indigenous population with such disrespect, contempt and indifference.
21272. There is no justification to bully our way through with a pipeline when all efforts to reconcile long-standing issues with the indigenous people have been inadequate. Why the rush for oil when the indigenous people wait? Again, I don't understand what's with that.
21273. This project will have a negative impact on me because, as a disabled worker thrust into poverty because of my on-the-job injury, I see efforts and financial resources that could help B.C.'s many poor and impoverished instead diverted and focused to ensure profits for a corporation for a project with such evident and strong public objection.
21274. I was asked by the Joint Review Panel for my views on whether the project is in the public interest. What a silly question that is. The answer is, of course not. This pipeline project is in the interests of a few rich who the public do not need.
21275. Those rich could all die in a tragic horse polo event for charity with a pip pip and a cheerio; nothing would change. If investors' money is not put into this project or another fossil fuel project, it would be put into the next most-profitable venture for them so their money can make more money and they can still become even richer.
21276. I prefer those rich greedhead investors to get rich off environmentally

**Oral statements**  
**Exposés oraux**

friendly and renewable resources such as wind farms, solar power, pedal power, marijuana hemp farms, whatever.

21277.           Whether we are talking fossil fuels, tar sands or heavy bitumen oil -- how do you pronounce it, bitumen, bitumen, I'm not too sure -- but, anyways, the ugly oil that we have to pipe through our pipelines and whatnot and modify just so it'll flow through the pipelines, apparently, from what I understand. And an oil tanker -- to give us some perspective here, an oil tanker can hold about 200 to 500,000 barrels of oil, somewhere in there. Obviously there's a lot of variation, depending upon the ship.

21278.           One barrel of oil equals about 672 cups of oil. Right in here, this is like about a cup of oil right there.

21279.           **THE CHAIRPERSON:** Mr. Dean, would you please put that back in your pocket? There are no visual aids allowed other than what's on paper.

21280.           **MR. BRUCE DEAN:** Well, that's not what I read in the directions. It didn't -- it said that ---

21281.           **THE CHAIRPERSON:** Just on paper.

21282.           **MR. BRUCE DEAN:** They discouraged it but they didn't tell no visual aid for ---

21283.           **THE CHAIRPERSON:** No, just those on paper is what's allowed. Thank you.

21284.           **MR. BRUCE DEAN:** Well, they said you'd prefer to have it but didn't say it wasn't allowed so -- okay. So we're changing the rules right here? Okay.

21285.           **THE CHAIRPERSON:** If you want to check the procedural direction, it's been very clear, Mr. Dean.

21286.           **MR. BRUCE DEAN:** Yeah, okay. I printed it off at home, too, so I read through it so -- okay. Well -- and I guess the reason I have to have my visual aid in my pocket is because fear of it -- the dirty mess that it could create. I've got one little cup of oil that I brought to show here, okay.

**Oral statements**  
**Exposés oraux**

21287. Picture a line-up of people, a quarter billion people with that cup of oil that I wasn't even allowed to show here. It's in a protected baggie all closed up -- whatever -- and we're all worried about that in this meeting room here.

21288. Picture a line-up of a quarter billion people each with their own baggie going to your favourite stream, your favourite river, your favourite lake, even your -- and if you don't have -- you're not a nature lover, maybe even in the front seat of your car. How many people out of that quarter billion line-up would you allow to dump the oil into your car or into your rive or lake before you stop it and said this is madness?

21289. Yet we keep pursuing fossil fuels and we keep having the spills and the pipeline breaks that make my family rich. Not me; my family. And it's -- you know, we wouldn't let -- it would be one person maybe and you'd realize that the rest of the line-up's there do that, you'd be like "No, this isn't allowed". So that's the individual we'll stop, whatever, but the corporations, no problem at all. We can't even show a baggie of oil in this room here for demonstration purposes but yet we are considering putting a pipeline through.

21290. And that's all I've got. Thanks.

21291. **MEMBER MATTHEWS:** Thank you.

21292. Ms. Collins, please go ahead, and welcome.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. AMY COLLINS:**

21293. **MS. AMY COLLINS:** Hello. My name is Amy Collins. Thank you for allowing me the opportunity to speak today.

21294. As I was preparing my oral statement and thinking about exactly what I wanted to say, it occurred to me that at this stage in the hearings you've already heard all of the facts regarding the Northern Gateway project repeated to you again and again.

21295. You already know that Enbridge's proposed pipeline would carry over half a million barrels of crude oil each day from the tar sands to the rugged B.C. coast via the Douglas Channel, a channel known for its gale force winds, sharp bends and narrow turns, thick fog and massive waves, a channel recently identified by the geological survey of Canada as a tsunami hazard and possible

seismic fault zone.

21296. You already know that the pipeline would cross over 1,000 streams and rivers, including the salmon-bearing Fraser and Skeena watersheds. You already know that the pipeline would facilitate tar sands expansion, Canada's fastest growing source of greenhouse gas emissions, by 30 percent. And you also know that the pipeline would bring crude oil tankers to the B.C.'s north coast and into the region of the Great Bear Rainforest, one of the largest remaining tracts of unspoiled temperate rainforests left in the world, for the first time in history.
21297. At this point, I'm sure you can probably almost recite from memory Enbridge's alarming history of incidents. You know about July 2010 when 190,000 litres of crude oil spilled in Wisconsin only a month after a 230,000 litre leak near Red Deer, Alberta. And you know about the disaster in 2010 when nearly four million litres were spilled into the Kalamazoo River. And I'm sure you also know that in 2008, during the pipeline installation in Wisconsin, over 500 regulatory violations were incurred in one year of construction.
21298. You are probably sick of hearing that, according to Enbridge's own reports, between 1999 and 2010 they were responsible for at least 800 spills, and that these spills combined have released nearly seven million gallons of heavy crude oil into the environment, approximately half the amount spilled in the Exxon Valdez disaster in 1989.
21299. After all of the voices you have listened to, you could probably tell me better than I could you about the devastating impact an oil supply would have -- an oil spill would have on First Nations communities, on their food supply, culture and way of life.
21300. You're well aware of the ways in which nature and adventure-based tourism operations would be impacted, as well as commercial fishermen and others who rely on the ocean for their livelihood. And you know about the incredibly vast diversity of species that would be depleted or completely destroyed by an oil spill along the coast.
21301. I came here today to voice my opposition to the Northern Gateway project. I came to tell you about the ludicrousness of trusting an organization with a horrendous track record to transport crude and supertankers along a perilous journey through a pristine ecosystem. I came to explain that the Enbridge pipeline, if completed, would have a devastating and irreversible impact

on the people, the wildlife and the natural beauty of Canada. But then, you already know that.

21302. Thank you.

21303. **MEMBER BATEMAN:** Ms. Ray, thank you for coming today. Please begin.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. JANET RAY:**

21304. **MS. JANET RAY:** Thank you. Yes, my name is Janet Ray, and I'm here to speak against the proposed Enbridge Northern Gateway pipeline project with the hope of protecting our Pacific Northwest ecosystem for my children, my grandchildren and generations of life yet to be.

21305. I've worked as a family physician for over 20 years, and for the past 10 years I've specialized in addiction medicine. I've devoted a major portion of my life and work to optimizing the health of my patients, but now I realize with greater clarity that individual human health does not exist in isolation to our environment. This presentation is a continuation of my dedication to protecting the health of my patients and life on our planet.

21306. You don't need a medical degree to know that a bullet to the heart is lethal. No less true but much less obvious is that the development of a malignant mesothelioma lung tumour at age 40 is the result of asbestos exposure at age 20. We know of the link now, but because the time period from exposure to developing this disease is long, it took a long time to confirm the relationship. Many disturbances to the natural world are more like the mesothelioma and not like a bullet to the heart. It takes time to see the impact.

21307. For a long time in the sixties and seventies it wasn't known why there was an increase in the endangered species of birds. Only later it was discovered that the DDT's sprayed on crops was absorbed by insects, which were eaten by these birds which made their shells weak and caused them to crack when the nesting mothers sat on the eggs trying to protect them and keep them warm. Today, nearly 40 years after DDT was banned in the U.S., we continue to live with its long-lasting effects.

21308. The USDA found DDT breakdown products in 60 percent of heavy cream samples, 42 percent of the healthy kale greens and lesser amounts in other



**Oral statements**  
**Exposés oraux**

- vegetables. DDT breakdown products have been found in the blood of 99 percent of the people tested by the Centre for Disease Control. Girls exposed to DDT before puberty are five times more likely to develop breast cancer, according to the President's cancer panel.
21309. So what does this have to do with the Northern Gateway pipeline? It illustrates the fact that the web of life and our human health as part of that web is interconnected in ways that are often hard to understand, let alone anticipate.
21310. I'm concerned that the Northern Gateway pipeline project represents an unacceptable risk of persistent pollution to the waterways and surrounding land which will, in turn, have a negative effect on human health and the ecosystems that support us. It's not a question of if there will be spills; the only questions are how many, how often, how big, where and when.
21311. You don't need to be an expert to know that a bitumen soaked bird is soon to be a dead one, but what is the effect of bitumen spills on an entire ecosystem and, importantly, what would be the direct and indirect effects of recurrent bitumen spills on local marine life and human life in 40 years or longer?
21312. I find it worrisome because I've researched this, but I could find no long-term studies on the health effects of exposure to soils and water that have been contaminated by bitumen.
21313. Immediate and direct effects from the bitumen spill at Enbridge Kalamazoo in 2010 included headaches, intense nausea and vomiting, respiratory problems. Bitumen is heavier and more difficult to clean up from waterways and presents the probability of persistent contamination to the spill environment. I find it shocking that, 20 years after the Exxon Valdez spill, there are no reliable or comprehensive studies to document the health consequences of exposure to the spill.
21314. In a 2010 article by Kyle Hopkins, the Labourers International Union team of specialists warned Alaska State Labour Department shortly after the spill that spill workers could face lingering kidney and nervous system damage from prolonged exposure to oil and called for the long-term monitoring of worker health. Unfortunately, no formal follow-up study was ever undertaken, or if it was, its results were not published.
21315. The Northern Gateway pipeline, as it is proposed now, would run

**Oral statements**  
**Exposés oraux**

- through a number of B.C. communities, creating the potential for human contact in the event of a spill. In view of the lack of scientifically sound information on which to judge the long-term safety of exposure to bitumen spills, I think we need to use the precautionary principle, and in the spirit of the Hippocratic Oath, first do no harm. Otherwise, we risk the possibility of endangering the health of future generations similar to or worse than the DDT fiasco of the 1960s.
21316.           There is a wealth of evidence which demonstrates persistent damage to marine ecosystems that result from petrochemical spills, which would then have a negative ripple effect on human health, contaminating water, and potentially eliminating foods traditionally harvested from the land and sea.
21317.           Perhaps it is because of my work in addiction medicine, but when I think about the trajectory of destruction that will result if this pipeline is built, the image that comes to my mind is the before and after picture of a crystal meth addict. Perhaps you've seen these pictures in magazines or online.
21318.           The before picture of often a fresh young face that looks like she could be the girl next door or your own daughter, full of promise for a wonderful future. The after picture shows an emaciated, pale face with dishevelled hair and scabs picked raw. I see this. Could this really be the same person? How could anyone let themselves get like that, we wonder.
21319.           A crystal meth addict doesn't wake up one day and decide to become a paranoid, penniless, scabbed and pock-marked shadow of their former selves. They wake up wanting their next short-term, feel-good experience. The intense reward and pleasure of this short-term experience blinds them from seeing the long-term consequences of their actions. They think, how can something that feels so good possibly be bad?
21320.           Interventions by concerned family and friends fall on deaf ears. In the addict's mind, they rationalize, "They don't know what they're talking about. They don't know how good this is. It's different with me. I'm in control". At what point do they wake up and see the sores covering their bodies and the destruction that's been done?
21321.           The first pipe of crystal meth doesn't result in any outward sign of destruction, but pipe after pipe, month after month, and the person becomes unrecognizable. Gone is the promise of a wonderful future, and instead their life has become a living hell.

**Oral statements**  
**Exposés oraux**

21322. In a very similar way, I believe that the proponents of this pipeline are not willfully destructive people, nor are they thoughtless or uncaring. They don't wake up in the morning and say, "I want to destroy the delicate ecosystems and marine habitat that the pipeline and tankers will traverse". But the lure of intense, relatively short-term monetary gain from the Northern Gateway pipeline is blinding the proponents to the long-term destruction that could and will result. They think, "How can something that's so good for the economy possibly be bad?"

21323. I can imagine that these presentations from those of us opposing this project will fall on deaf ears with the proponents thinking the protesters don't know what they're talking about. We're in control. We can handle any spill or problem that comes up. It'll be different this time.

21324. These are the denial thoughts of all addicts. One spill will not result in complete devastation, but I believe that spill after spill, year after year will result in a downward spiral in the health of our ecosystems, completely unforeseen and unpredicted by those who are reaping financial benefit, but clear in the minds of the people making presentations to this Panel.

21325. These hearings expressing concern over the consequences of the Northern Gateway pipeline are an intervention by your concerned and loving human family to warn the proponents of the dangers, to ask you -- to tell you to stop before it's too late; to stop this pipeline before our ecosystems become so contaminated that they look like the after -- the biological equivalent to the after picture of a crystal meth run.

21326. This environment is not ours to destroy. We the people living now are the ancestors of those yet to be born. We are borrowing this environment from our descendants. Let's try to leave our part of this Earth like the before picture, full of promise for a vibrant and healthy future.

21327. Thank you.

21328. **THE CHAIRPERSON:** Thank you to both of you for your oral statements this afternoon.

--- (A short pause/Courte pause)

**Oral statements**  
**Exposés oraux**

21329.           **THE CHAIRPERSON:** Good afternoon. Staff have just let us know that some people, imagine that, haven't been following this since the very first day that we started to hear oral statements in Victoria and so may not know who each of us is, so I'll just take a moment and introduce ourselves again for the benefit of everybody.

21330.           So my name is Sheila Leggett. On my right is Mr. Kenneth Bateman.

21331.           **MEMBER BATEMAN:** Hello.

21332.           **THE CHAIRPERSON:** And on my left is Mr. Hans Matthews.

21333.           **MEMBER MATTHEWS:** Hi.

21334.           **THE CHAIRPERSON:** So our apologies. I guess by now we thought that everybody knew who we were, but apparently not.

21335.           **MEMBER MATTHEWS:** We should have name tags like you guys.

21336.           **THE CHAIRPERSON:** That's right, exactly. Yeah, we have them in other scenarios in the hearings, but thank you to whoever raised the point so that we can make sure that everybody knows who we are.

21337.           Ms. Gilchrist, we know who your name is because your name tag's in front of you. Please proceed with your oral statement.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. EMMA GILCHRIST:**

21338.           **MS. EMMA GILCHRIST:** Thank you.

21339.           I'd like to thank the Panel for listening and taking into account all of our statements this week. I empathize with the enormity of the decision you have before you and I'm really grateful for the opportunity to be part of this public process.

21340.           In a time when so many people lament voter apathy and citizen apathy in general in this country, I think it's a wonderful thing that more than 4,000 people registered to present at these hearings and I've really enjoyed listening to the many stories this week. So now time for my story.

**Oral statements**  
**Exposés oraux**

21341. My name is Emma Gilchrist. I am 28 years old, and I'm a freelance writer and communications professional here in Victoria. I spent the first 18 years of my life living in northern Alberta, four hours northwest of Edmonton, in a small town called Valleyview, near Enbridge's proposed pipeline route. Nearly every friend I grew up with now works in the oil and gas industry, and they're still my friends.
21342. I grew up fascinated by democracy and this thing called the public interest that we're all here to talk about today, and that's why I decided to study journalism in Calgary 10 years ago. I love the concept of the media as the fifth estate, as a watchdog, as a force to keep governments and industry in check, and one of my first jobs in journalism was at a newspaper in England.
21343. When I got back from that experience, I came back to Calgary after that, I was struck by some of the major cultural differences. So you know, things that had seemed normal all my life growing up in the backwoods of Alberta started catching my attention. The big trucks idling in the parking lots, hard to use recycling system, you know, a lack of kind of labelled organic food options and stuff like that.
21344. This was honestly the first time I had paid attention to environmental issues. It was kind of a contrast and I was just like, oh. So as a very practical pragmatic person and also a bit of a researcher, I started researching, you know, how to live a greener life in Calgary. And I realized through this process that I wasn't alone.
21345. So at that time, I was working at the Calgary Herald and I started writing a guide to greener living called "The Green Guide". And much to my dismay, this pet project ended up being a huge hit with the readers. It was on the front page of the paper every Friday. It won international recognition and across a span of three years of doing that I, obviously, moved on from wanting to know how to recycle and, you know, how to choose a fuel-efficient car and I started wondering, you know, what individuals can really do to have a bigger impact.
21346. This is a question I was being asked all the time. We did a lot of Q and As. And you know, so to help shape government policy, for instance, beyond voting every four years.
21347. So that's where I started to hit a bit of a wall. It really wasn't clear to me, you know, what could be done to change things on a larger scale. And so at

- that point I continued my search for answers in the environmental non-profit sector.
21348. This new line of work was appealing to me for the same reasons as journalism. The concept of being a watchdog, you know, you're filing Freedom of Information requests, raising awareness about emerging issues, holding elected officials to account. And somehow through this, I've found myself now as the communications director for Dogwood Initiative.
21349. I never in a million years expected to land myself in the midst of one of the biggest environmental battles of our time, but somehow I did. It began at a feast in Kitimat Village about three years ago where more than 1,000 people, mostly First Nations, had travelled hundreds of kilometres for a solidarity gathering on the water near where Enbridge would like to build its oil tanker terminal. I ate local crab and eulachon, and tried sea urchin, which was a bit of a stretch for a Prairie girl, but that weekend changed my life.
21350. It was then that I realized this wasn't about this age-old environment versus economy debate. It was about a way of life that had existed for centuries. It was about human rights. It was about the kind of country that I wanted to live in. And I realized then that if this wasn't worth fighting for, there wasn't anything in life that was. So I hopped off my journalism chair and here I find myself here today wearing many different hats.
21351. Largely, I believe this is a debate about whose right it is to make this decision. I believe it's a decision to be made by the people who bear the burden of risk, and that is the people of British Columbia and the First Nations who have lived off the bounty of B.C.'s coast for thousands of years.
21352. People will try to tell you this is about environment versus economy, but it isn't. It's about an existing coastal economy that has sustained British Columbians for centuries and employs 45,000 people versus the oil industry's insatiable appetite for expansion no matter the risk, no matter the consequences.
21353. People will try to tell you this project is in the national interest, but it isn't. Tying our economy even more tightly to the export of a single unrefined raw resource is not in the national interest. Tripling oil sands production at a time when, 40 years into development, baseline environmental monitoring is only just getting put into place is not in the national interest.

**Oral statements**  
**Exposés oraux**

21354. I agree with late former Alberta Premier Peter Lougheed, who advocated for a more sustainable pace of oil sands development and a more intelligent investment of the revenues generated by the extraction of non-renewable resources. When Lougheed was Premier of Alberta, Albertans collected 40 percent of the value of Alberta's energy sector through royalties and taxes. Under Ralph Klein, that percentage dropped to 20, and now it's fallen to 10 percent.
21355. How is it that Alberta has been producing one of the world's largest oil deposits for decades and yet there's virtually nothing in the public purse? There's a budget crisis going on in Alberta as we speak. Hospital projects have been cancelled; roads are jammed; schools are over-filled; emergency rooms are overflowing, all while oil companies make billions upon billions of dollars a year.
21356. In 2011, Canadian oil companies netted \$18.7 billion in profits, according to Alberta Oil magazine. That's more than Alberta has collected in its heritage fund in 36 years. This is a fund that didn't receive a single deposit between 1987 and 2004, and by 2005, it was actually worth less than 20 years earlier. This is despite rampant oil sands development for the past decade, and this is out of line with jurisdictions around the world.
21357. We've heard much about Norway's \$340 billion they've collected since the mid-nineties. We've heard about Alaska, that's collected over \$40 billion since the nineties as well. So so long as the fiscal mismanagement of the oil sands continues, a further liquidation of our natural resources cannot be considered in the national interest, in my opinion.
21358. As for Enbridge, well, much has been made of their spill record, and we don't want to hear the same things over again. But based on their average spill rate, the Northern Gateway pipeline would spill about 160,000 litres of oil a year. All being well, that's the average. That's as good as it gets. And that's what British Columbians and the Panel has to decide whether that's good enough.
21359. So to Enbridge I say, you know, you've watched hours of testimony. You've watched an ex-U.S. Marine break down in tears this week over the threat of your project. And you've forced communities like Hartley Bay to divert many of their resources toward protecting what is rightfully theirs instead of moving forward with more positive projects. So please listen to what you're hearing.
21360. To the Panel, I ask you to consider, are you the type of people who

**Oral statements**  
**Exposés oraux**

- would force the risk of catastrophe on unwilling communities, on communities that have made their decision, on the cities of Terrace, Prince Rupert, Smithers, the communities of Haida Gwaii, all of whom have said no?
21361.           These are people, in Hartley Bay especially, who are living in fear every day, who say if this project goes ahead they'll be waiting for the day their community dies. Think about that.
21362.           Can you imagine living in a place for thousands of years and being told that you need to accept oil supertankers on your doorstep because it's in the so-called national interest?
21363.           I believe no means no. I believe communities have a right to say no. And I also believe local leaders know what's best for their own communities.
21364.           More than anything, I believe this conflict over Enbridge's proposal is catalyzing British Columbians more than ever to take back control of their public resources that are rightfully theirs. This decision has always been and will always be a political decision, and I expect the Government of B.C. to do everything within its power to stop this project.
21365.           We're heading to the polls here in B.C. in five months, and this proposal is sure to be a top election issue.
21366.           I have said all of these things today not because I'm a rabid environmentalist, not because I'm a radical, but because I care deeply about the public interest of all Canadians and I believe I have a responsibility as a citizen to be here for those who can't.
21367.           In closing, I'm going to share with you a message from David Wynne. He's one of the many people who registered to speak but were unable to attend due to health concerns and other things. He's 80 years old, and he is currently being treated for prostate cancer. He wrote this to me.

*“My message is just that the whole project looks unsound environmentally, politically, strategically and economically, and I want to face my grandchildren with a clear conscience. I don't want them to say, ‘Surely you could have resisted this lunacy. Why didn't you?’” (As read)*



**Oral statements**  
**Exposés oraux**

21368. Thank you for your time today, and please say a clear no to Enbridge's proposal in reflecting the testimony you've heard over the past year.

21369. Thank you.

21370. **MEMBER MATTHEWS:** Thanks a lot, Ms. Gilchrist.

21371. Good afternoon, Ms. Cook. Please go ahead.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. KATHERINE COOK:**

21372. **MS. KATHERINE COOK:** Thank you.

21373. Good afternoon and thank you for this opportunity to speak to you about my reasons for opposing the proposed Enbridge Northern Gateway Project.

21374. It is daunting for those of us who oppose the project knowing that oil fuels the global economy, that we are reliant on oil in every aspect of our lives and that developing countries are understandably hungry for the same standard of living that we in North America enjoy, and knowing the immense pressures to maximize economic gains that are being exerted by those promoting the project.

21375. Thank you then, for this forum where all sides can be heard with impartiality and respect. I recognize that your work is both difficult and so very important.

21376. Like so many others who are speaking to you, I am an ordinary Canadian with no specialized experience, expertise or information to share. I am nervous, as you can tell, but I feel compelled to speak to you because of my deep conviction that the proposed Enbridge Northern Gateway Project is an unprecedented and unacceptable threat to our coast.

21377. I realize that what I have to say to you, you will have heard from many others, but I believe that it is vitally important that you hear from as many of us as possible.

21378. I am here because of my responsibility to my children and along with all of our descendants who will live in the world that we leave to them. While I will focus on issues related to the coastal tanker route, I am here in support of First Nations and others who oppose this project, who live along both the pipeline

and the tanker routes.

21379. When I moved to Victoria in the early 1980s from Ontario, I was stunned at the natural beauty of this coast. My husband and I have raised two daughters here, and we count family camping, boating and hiking in British Columbia's wilderness areas among our most precious and formative times together. I am especially fortunate that this has included several trips to the Great Bear Rainforest.
21380. My family and I have deep connections with the land and seascapes of the coast. Our elder daughter now makes her home on the central coast, and we have close friends and family whose way of life, ancient culture, as well as incomes from fishing and ecotourism, are put at risk by the Enbridge Northern Gateway Project.
21381. Ultimately, all of us will be impacted by any oil spills along the proposed pipeline and tanker routes.
21382. The coastal shores and rainforests of British Columbia and Alaska account for more than one-third of the earth's remaining temperate rainforest. Visitors to the Great Bear Rainforest from around the world are filled with awe that such a wilderness still exists.
21383. Scientists tell us that the biological communities making up the rainforest are as rich and complex as any Amazonian tract, but less studied, and that nature will suffer irreplaceable losses if we allow these rainforests and their vulnerable species to be destroyed. In other words, we will have burned the library before reading the books.
21384. We human beings live in a reciprocal balance with these intricate ecological systems. We most often forget that we belong to the earth; we do not command it. We are blinded by our belief that economic interests are paramount and that technology has the capacity to overcome all obstacles to our economic goals. But there are places in the world where the forces of nature are so fierce that we are humbled, and we learn our place. The central coast of British Columbia is one of those places.
21385. As you are aware, the 900 kilometres from Alaska to Washington is comprised of 27,000 kilometres of remote and rugged coastline, hundreds of islands and dozens of inlets. The proposed tanker route consists of torturously

- narrow channels, submerged reefs and sharp turns. It is known to have wave heights up to 26 metres, and winds gust up to 185 kilometres per hour.
21386. Environment Canada's marine Weather Hazards Manual states that Hecate Strait is the fourth-most dangerous body of water in the world.
21387. Underwater earthquakes are another hazard causing localized tsunamis. Douglas Channel was the site of two tsunamis in the mid-1970s. The 1975 tsunami destroyed the northland navigation dock near Kitimat and damaged the Haisla First Nation docks at Kitimat Village.
21388. And only this summer, the Geological Survey of Canada reported the discovery of an active fault that makes future landslides -- landslide-induced tsunamis in the Douglas Channel a higher risk than we've previously understood.
21389. No oil terminal of the sort proposed by Enbridge in other parts of the world has operated longer than 18 years without a serious accident. The central coast's fierce marine environment, coupled with the inevitable limitations of our humanity, mean the best technology in the world will be unable to prevent accidents.
21390. This is evidenced by the fact that, between 1999 and 2008, the routes that Enbridge intends to use for tanker traffic experienced five major accidents in large vessels. Less than two weeks ago, an oil rig under tow was grounded on an Alaskan island due to equipment failure in the midst of a cyclone. High risk conditions, equipment failure and human error are inherent in shipping on the central coast of British Columbia.
21391. The Enbridge Northern Gateway Project entails tankers of an unprecedented size and in unprecedented numbers in these treacherous waters, making a significant accident virtually inevitable. Reassurances about the safety of tanker construction and operation also ring hollow because Enbridge wouldn't have no liability once that oil is loaded onto the tankers.
21392. All coastal people rely directly and indirectly upon the health of the environment for their livelihoods. This region boasts many innovative initiatives and plans for environmentally sound economic development that should be supported and not put at risk by this project.
21393. For example, Coastal First Nations are working in alliance with others

**Oral statements**  
**Exposés oraux**

- to create economic opportunities in renewable energy, carbon credits, sustainable forestry, ecotourism, non-timber forest products and local businesses such as seafood processing and shellfish aquaculture.
21394. Those who have lived on this coast in prosperity and harmony for over 10,000 years have much to teach the rest of us. We, who came to this coast so much later, have a moral obligation to recognize the rights of Aboriginal peoples, to learn from them and support their efforts.
21395. In the traditional potlatch economy, the wealthiest people confirm their authority and leadership by giving the most away. These values stand in sharp contrast to those of the Enbridge Northern Gateway Project, which aims to reap maximum, short-term profits by putting a rich and fragile ecosystem and its people at virtually certain risk of catastrophic damage, likely within a generation.
21396. Jessie Housty, an eloquent young leader of the Heiltsuk people in Bella Bella, has written:
- “Every culture evolves, but there is something irrefutable at the core of our cultural identity that remains through time. And as we have adapted to our changing lands and waters, we have aligned ourselves to the rhythm of the coast.”* (As read)
21397. More than an antagonist, tar sands crude shipped through these waters threatens an abrupt end to the deep stories of the coast.
21398. In conclusion, I think that the risk associated with the proposed project is unacceptable and no amount of technological sophistication can change this fact. I ask you to say “no” to the proposal and to be explicit about the values that underpin your decision.
21399. In saying “no” to this project, we can simultaneously say “yes” to refining and using our fossil fuels wisely here in Canada while moving to renewable sources of energy. This is a transformational and multi-generational task requiring federal government leadership.
21400. For inspiration, we can look to countries such as Germany, Bolivia and Ecuador. Germany estimates that by 2050, between 80 to 100 percent of their electricity will come from renewable sources. Much poorer countries, Bolivia and Ecuador, have made constitutional reforms recognizing their citizens’ rights

to a healthy environment as well as the rights of nature.

21401. Please continue to listen to our repetitious oral submissions, to our public events and to our demonstrations. Please hear the values in our collective message. Canada must say “no” to this project. We must, instead, build a sustainable economy based not on the motive of short-term profits but on respect for the rights of our wilderness, of our people and our descendants for a healthy future.

21402. Please do not mistake the strength of our numbers or the passion of our messages for disrespect. Please keep these hearings open.

21403. Thank you.

21404. **MEMBER BATEMAN:** Thank you, Ms. Cook.

21405. Mr. Deschenes, thank you for coming today to present your views. Now please take the next 10 minutes to let us understand them.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. STEEVE DESCHENES:**

21406. **MR. STEEVE DESCHENES:** Thank you very much for listening.

21407. My name is Steeve Deschenes. I’m a proud dad of an eight years old daughter that I really enjoy going to the beach with her and enjoying that. And she’s actually starring -- starring in a movie that my friend did and won an award in Toronto, so she’s really in love with the marine life.

21408. I’m a student. I’m doing my Master in geography. I did my BHC at University of Victoria in geography. For my Master, I’m modeling heavy metals and contaminations in soil across B.C. so I had to read a little bit about pollutants and contaminations. And the story is always sad to take.

21409. My specialization is in exposure of contaminants, mostly VOCs, heavy metals, VAH in human and ecosystem. And I’m -- unfortunately, I don’t want to have to look for a job in northern B.C. to calculate the exposure level from an oil spill caused by Enbridge pipeline.

21410. I have also a background in business administration, including economics and social science that I took a few years ago in Concordia University,

- so I kind of, what I will say, understand both sides of the metal.
21411. My partner is from Alberta and my brother-in-law works at the Fort McMurray at a major Imperial Oil site. And most of my partner's family reside in Calgary and is heavily dependent on oil and gas industry for their livelihood. So we're having very interesting Christmas dinner.
21412. I'm not here to speak against his job, nor do I wish him to lose it because of my opinion on the Northern Gateway pipeline. My opposition is against the people -- it's not against the people that work there. It's about the way that it's done and the political and economic adverse effect that project will have on Canada. I am a concerned citizen that wants to live in harmony with the planet and my fellow humans.
21413. My first argument is about the economic benefits of this project. I agree it will create wealth, but I think Enbridge and its friends will be the only ones who will enjoy it.
21414. If jobs are so important for British Columbians -- so I'm wondering why we have to import foreign workers to work in our B.C. mines. If there's not enough British Columbians to fill the mining jobs, why we need more jobs and built -- to build a dangerous pipeline across the province?
21415. I believe that we have a biased government that seems to have only one concern, which is the privatization of energy resource extraction profit and the socialization of the risk related to that extraction. The effect of this privatization includes adverse effect on social, economic, political and the environmental aspect for all B.C. citizens and Canadians alike.
21416. As long as the federal and the Alberta governments are in deficit, I refuse to believe that increasing the extraction and our transportation capacity of the Canadian tar sand is the solution to their economical problems. If after all those years that the tar sands have been exploited, I can't believe that the revenue generated are not sufficient for our governments to balance their budget while oil companies are making billions in profits.
21417. For the environmental impact, what else is new? What else that you haven't heard from? The environmental threat to every ecosystem the pipeline will cross, including tankers accident, goes far beyond Enbridge's capacity to protect it.

21418. The pipeline will carry a toxic product that cannot easily be recovered if spilled, and it will be spilled. The bad reputation of the proposal company, for example, the misleading propaganda in regards to the risk of the proposed pipeline, the Kalamazoo spill in the Michigan, as well as the more recent in Wisconsin, are all well known now.
21419. Navigation safety cannot be guaranteed. A spill is just a matter of time. Who will pay for the safety installation, by the way, from the open ocean to Kitimat port? Who will pay for the clean-up when the spill will occur? And what will First Nation people eat if their traditional fish diets are impacted by a spill and including, as well, everybody else living downstream the pipeline projects?
21420. Climate change is a challenge that are not recognized by the proposed development. Thawing permafrost, more severe drought, glacier melt affecting the river levels and so on -- are the people of Alberta know that the melting glacier is affecting their water supply? What will happen when there's no more glacier; more severe drought for Albertans? What about the risk for a major earthquake or even a series of minor quakes in this very seismically unsound region?
21421. I don't think there's any respect for human lives. Us First Nation people are treated by the -- by a part of the populations as a second-class people that don't deserve respect and recognition of their traditional -- traditions and views by imposing them a project like that.
21422. In conclusion, we are aware of the growing number of citizens opposed to the project in British Columbia can only increase as the truth behind the tar sand -- tar sand thief of the public relation machine's agenda comes to light. There is no rush to extract all the tar sand resource as fast as we can. It's there. We -- if we've got to do it, do it a way that would protect the beauties of B.C. and especially the beauties of Alberta as well.
21423. I don't believe Albertans want to see their province destroyed and contaminated, so British Columbians as well. I am not against the development. I'm against destructive development and I believe that pipeline is one of them. Let's show the world that we care for the earth as Canadians. Let's take the right actions to build a better world. We can be a positive change. We know the problems, we have the solutions, let's have the courage to do it.

**Oral statements**  
**Exposés oraux**

21424. Judging from the past experience, no current oil companies is up to the task of building and safely managing a major pipeline through the wild of British Columbia, much less navigating large supertankers through those treacherous coastal waters. I will support that project only when the major players, Enbridge executive, as well as the Conservative government Cabinet pushing the proposition, will be held responsibly, accountable for any disaster that will occur without limitation on their liabilities on that.

21425. Are they ready -- are they ready to put their money where -- to put the money where their mouths are? I am still waiting for the Honourable Minister Joe Oliver to drink the water of the tailing ponds as he stated in the news. Will he also be promising to drink from a contaminated river after an oil spill? I'm waiting for his propositions on that.

21426. I know I'm not alone against the project; we are a legion. And for conclusion, I would like to express my support for Chief Spence.

21427. Thank you very much for listening.

21428. **THE CHAIRPERSON:** Thank you very much to each of you for taking the time to be here today and to prepare and present your oral statements.

21429. **MR. STEEVE DESCHENES:** Thank you very much.

21430. **MEMBER MATTHEWS:** Thank you.

--- (A short pause/Courte pause)

21431. **THE CHAIRPERSON:** Good afternoon.

21432. Mr. Hedley, when you're ready please proceed with your oral statement.

--- **ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. ALAN HEDLEY:**

21433. **MR. ALAN HEDLEY:** Thank you and hello and good afternoon to all. My name is Alan Hedley and I have lived on this coast, on the B.C. coast for all my life which happens to be 72 years. And I was wondering why specifically I am appearing here and I was put in mind of a -- of a book I wrote and it's a constant theme that presenters have -- have made this afternoon.



21434. In the book that I wrote which was called “Running Out of Control: Dilemmas of Globalization”, I -- I dedicated the book to our grandchildren’s children and I think that is -- is really, really, really significant to these hearings and we don’t own this earth; we’re just -- we’ve -- we’ve got passage on it.
21435. And I’ve heard also this afternoon people giving thanks to the First Nations people whose land we’re on. There is an old Iroquois saying about seven generations and important decisions should not be made without taking into consideration seven generations hence. The seven generations hence equals 175 years.
21436. I said I was 72 years old, born in 1940. Those of us in that generation had a pretty bountiful world to grow up in and we are now not leaving the same kind of world to our children and to our grandchildren’s children.
21437. I first learned about the Enbridge proposal, I guess around 2010, maybe a little bit before and I was particularly concerned because of my personal history about the coastal tankers and the -- and the proposed routes, northern -- around the north end of Haida Gwaii and south -- the southern tip of Haida Gwaii. And I had remembered a 1972 moratorium on tanker traffic in -- in along the west coast and it was -- I renewed with a petition signing that moratorium a couple of years ago and the intention of the petition was to extend and legalize it into a permanent legislation.
21438. Just one second. Oh, at the same time as all of this is occurring, I -- I read a book by John Vaillant called “The Golden Spruce”, and this was published in 2005. And it’s a story about the logging industry and I wasn’t going to quote the -- the subtitle of this book but I think it’s very relevant to these hearings. It’s called “A True Story of Myth, Madness and Greed”.
21439. The -- the last speaker who was sitting in that place there mentioned Hecate Strait which is the body of water between Haida Gwaii and -- and the mainland and you can see it up there, it says Hecate Strait.
21440. John Vaillant who won a Governor’s General medal for this book researched so many aspects of -- of this industry, including the meteorology of the -- of the weather and so on. “The Golden Spruce” takes place -- the logging industry -- it originates in Haida Gwaii but it’s all up and down the coast.

21441. And if you will permit I would just like to read his description because it's absolutely phenomenal, this body of water called Hecate Strait:

*“A number of places lay claim to the title ‘Graveyard of the Pacific’ and the west coast of Vancouver Island is one of them, but it would be more accurate if its limits were extended to include all of Coastal British Columbia. Well over a thousand vessels have gone down here during the past 200 years and Hecate Strait is arguably the most dangerous body of water on the coast. The Strait is a malevolent weather factory. On a regular basis its unique combination of wind, tide, shoals and shallows produces a kind of destructive synergy that has few parallels elsewhere in nature. From the northeast come katabatic winds generated by cold air rushing down from the mountains and funnelling wind tunnel style through the region’s many fiords, the largest of these being Portland Inlet which empties into the Strait 50 kilometres north of Prince Rupert. Winter storms meanwhile are generally driven by Arctic low pressure systems borne over Alaska and they tend to manifest themselves -- manifest themselves as southerlies along the coast. It is because of these winds that the weather buoy at the south end of Hecate Strait has registered waves over 30 metres high. One of the things that makes the Strait so dangerous is that these two opposing weather systems can occur simultaneously. Thus, when a southwesterly sea storm blowing at 80 to 160 kilometres an hour collides head on with a northeasterly katabatic wind blowing at similar strength, the result is a kind of atmospheric hammer-and-anvil effect.*

*Veteran north coast kayakers tell stories of winds like this lifting 180 kilograms of boat and paddler completely out of the water and heaving them through the air. But this is only one ingredient in Hecate Strait’s chaos formula. Tides are another; in this area they run to 7 meters which means that twice each day vast quantities of water are being pumped in and out of the coast’s maze of inlets, fiords and channels.*

*The transfer of such volumes in the open sea is a relatively orderly process, but when it occurs within a confined area like Hecate Strait that is not only narrow but shallow, the effect is*

**Oral statements**  
**Exposés oraux**

*of a giant thumb being pressed over the end of an even larger garden hose. The scientific name for this is the Venturi Effect, and the result is a dramatic increase in pressure and flow.*

*A third ingredient [and this is the last] is a frightening thing called an overfall which occurs when wind and tide are moving rapidly in opposite directions. Overfalls are steep, closely packed, unpredictable waves capable even at a modest height of four to five metres of rolling a fish boat and driving it into the sea bottom. They can show up anywhere but their effects are intensified by sandbars and shoals like the one that extends for 30 kilometres off the end of Rose Spit between Masset and Prince Rupert.*

*Under certain conditions, overfalls take the form of blind rollers which are large, nearly vertical waves that roll without breaking. Not only are these waves virtually silent, but under poor light conditions they are also invisible until you're inside them. If one of these factors in the prevailing deep swell that in winter eastward through the Dixon Strait at heights of 10 to 20 metres and the fact that a large enough wave will expose the seafloor of Hecate Strait, the result is one of the most diabolically hostile environments that wind, sea, and land are capable of conjuring up." (As read)*

21442. That passage prompted me to engage in research on shipwrecks and -- and weather conditions off the Hecate Strait and I came across 10 items which I have submitted, one of them by the Royal Society of Canada in 2004, and it concludes that the panel -- conclusion of the panel is that the present moratorium preventing oil tankers from shipping through the Queen Charlotte Basin should stay in place for the time being. That was a 2004 publication.

21443. So then I thought that all of this material would be of interest to the National Energy Panel and -- and so I made the submission and waited for my turn to appear before you today.

21444. But while I was doing that the -- the world doesn't stop and newspaper articles appear, and in November, two very large sea cargo vessels almost had disastrous consequences.

**Oral statements**  
**Exposés oraux**

21445. One in the -- in the same Hecate Strait, to avoid a fish boat, veered into a sandbar and was stuck and another during a storm was -- ran out of engine power. And just last week we are exposed to the -- the travesty of -- of Shell Oil attempting to take an oil rig out of Alaskan waters to avoid taxes of 6 or \$7 million, and in so doing had to get the hell out of the Alaskan waters and so ---

21446. **THE CHAIRPERSON:** Mr. Hedley, you are well over time, so could I invite you to summarize with one or two last sentences please?

21447. **MR. ALAN HEDLEY:** Okay. --- that was a disaster. The -- the consequences of anything happening are -- are too risky.

21448. And I -- I have a friend who always asks the question, “What is the worst that can happen”, and the worst that can happen, nobody in this room can imagine.

21449. Thank you.

21450. **THE CHAIRPERSON:** Thank you, Mr. Hedley.

21451. **MEMBER MATTHEWS:** Good afternoon, Mr. Holt. Please go ahead and share your views with us.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. MICHAEL HOLT:**

21452. **MR. MICHAEL HOLT:** Good afternoon Members of the Panel, ladies and gentlemen. I’m Michael Holt and I speak for myself as a British Columbian. And contrary to the opinion of the federal government, I am not paid or supported by any radical foreign environmental group.

21453. The Prime Minister and Government of Canada have already determined that this pipeline project will happen. On a February 2012 visit to China, the Prime Minister emphasized to the Chinese that the pipeline will go through. This was before the hearings were even properly underway, indicating his attitude towards whatever findings or recommendations might come out of the hearings.

21454. Earlier in the year, actually the month before, on a radio show in Calgary, he announced his determination that the increased oil traffic -- oil tanker traffic resulting from the pipeline project would be approved, stating that since

- there was lots of tanker traffic on the east coast, what was the problem with doing it on the west coast too.
21455. He's obviously completely ignorant of the significant differences between the east coast open ocean and the narrow island-studded inside passages between Kitimat and the open west coast ocean. He probably got his charts, if he even bothered to look at any, from the Enbridge PR department who do not recognize islands as impediments to ship movements. I didn't know though that Enbridge had re-charted the whole coast.
21456. Anyway, it would appear that the federal government will ram this project through against all opposition. They hold strong beliefs that selling off our natural resources to make a quick buck now is preferable to developing them here in Canada to create Canadian jobs for this and future generations, to preserving them and using them for the benefit of all Canadians instead of foreign investors and multi-national corporations.
21457. John D. Rockefeller said many years ago that "The secret to creating long-term wealth was to never spend your capital. Invest it and live off the proceeds".
21458. Our natural resources are our nation's capital. So we can expect that the government will continue to push this project through by gutting our environmental protections, silencing our scientists and selling us out to China and other foreign investors.
21459. It would be interesting to see how they deal with the people, including our First Nations who they've already tried to buy off, when these people camp out in front of the bulldozers and backhoes every step of the way from the oil sands to Kitimat ---
21460. **THE CHAIRPERSON:** Again, Mr. Holt, I think we've -- we've said this before but making remarks about potential civil disturbance or any kind of unlawful obstruction really isn't helpful to this Panel in what we need to think about, so we'd ask you to move on to your next point.
21461. **MR. MICHAEL HOLT:** Okay. Well, I was just going to say that we've seen protests before and since this is our largest and biggest environmental issue that's faced British Columbia we can only expect that -- that whatever protests come are going to be even bigger. So, I suspect that Enbridge will have

- to fight to put this through foot by foot, river by river and reserve by reserve.
21462.           So it would appear that these hearings are just window-dressing as far as the government and Prime Minister are concerned. The decision's been made and these hearings are to provide a semblance of democracy by pretending to give people some input and will have little effect on the final outcome.
21463.           But let's assume that the Commissioners here could exert enough influence on the details if not on the whole project and so I'd offer some thoughts on where things could be greatly improved over the present plans even if the project does go ahead.
21464.           The first and biggest change that is required is to refuse to allow bitumen and heavy crude to be transported at all by any means. It is heavy crude that has destroyed the sea bottom in the area of the Exxon Valdez, killing off all bottom life and much of the life that is sustained by it. Heavy oil sinks to the bottom, where it sits for years, exuding toxic gases to the detriment of all life. The same problem exists in the Gulf of Mexico, following the BP platform disaster. The problem is heavy crude and bitumen.
21465.           We must insist that both pipeline and tankers carry only processed oil in the form of stove oil, diesel, gasoline and so on, which, when spilled, evaporate fairly quickly and cause significantly less local damage.
21466.           Building a refinery near the Alberta border, not at this end of the pipeline as has been suggested, will resolve this issue and create long-term jobs in the process. True, it's expensive, but probably not as expensive as thoroughly cleaning up a series of major spills. And if it's economically feasible for the Chinese to build a refinery to process it over there as well as pay the extra cost of shipping raw bitumen, it makes sense that it's also economical for us to build it here. Canadian jobs are as important as Chinese jobs.
21467.           So my number one suggestion: build a refinery and ship processed oil only. It's high time we stop shipping raw logs, unprocessed oil and minerals to the west, along with the jobs that they represent, which reminds me that it would seem to make sense to ship processed oil to the eastern provinces who import it from the Middle East. Why can't we consume Canadian oil products in Canada? The answer, as usual, is "Follow the money."
21468.           This whole project is designed to make a lot of money for a very few

wealthy people and corporations, not to benefit the people of Canada who actually own the oil.

21469. Next, let's make them use double-walled pipe. Most of the cost of a pipeline is in the infrastructure, permits, purchase of right-of-ways and material handling. Adding a bolt-on second pipe around the main pipe would virtually eliminate the chances of a spill of any magnitude because it could be detected, isolated and repaired almost immediately. The technology exists. All that stops its use is the greed for greater profits at the risk of environmental disaster.
21470. Finally, once the oil reaches the Coast, it will have to be shipped by tankers. It would make far more sense to ship from Prince Rupert, as you can see on the map, directly into the open ocean than Kitimat, buried as it is amongst islands, strong tides and currents and unpredictable winds. Why was Kitimat chosen? It's the shorter pipeline route, but the extra cost of the pipeline would probably be recovered by the much less stringent and expensive tanker controls and handling necessary at Kitimat. I don't know the answer to that one, but to find it, I suggest the usual approach: "Follow the money."
21471. And what about tankers? Double hulls will only make them a bit safer, not eliminate the risk. There have been several major spills involving double-hull tankers already elsewhere in the world. In 2010 we had the Bunga Kelana 3 spilling 3 million litres of crude into Singapore Strait and the Eagle Otome spilling almost 2 million litres on its way to Beaumont, Texas, all in the open ocean, both the result of collisions, not groundings.
21472. In the past 30 years, we've had over 14 tanker accidents spilling over a million gallons each around the world.
21473. I see that my time is running, so I'll skip a little bit here.
21474. I have full confidence in the pilots and their ability to handle the ships. They're well-trained professionals, but when that single engine quits in the middle of a winter gale at full-flood tide, the pilot is just as helpless as anyone. By the time the big tugs get to the scene, it will probably be too late, and despite the assurances of Enbridge, there will not be two large tugs capable of handling a fully loaded tanker in those conditions, accompanying every tanker. They're going to be on standby at the Kitimat Marine Terminal and will take anywhere from a few hours to 24 hours to reach the scene of the disabled tanker.

**Oral statements**  
**Exposés oraux**

21475. This is just another misleading offering by the same people who magically removed all the islands in Douglas Channel.
21476. Just one serious accident will ruin the B.C. Coast for generations to come, along with thousands of jobs, not to mention the environmental mess. Remember, it will take only one, and beautiful B.C. will be history.
21477. Our B.C. government belatedly jumped onto this issue when it became evident that people here were seriously opposed to it, but as is typical of governments, they grab the wrong end of the stick. They focused on the idea we should be making some money out of this instead of following the lead of the people. We don't care about the money. We care deeply about the beauty and sustainability of our province, our coast, our home, our children and our future.
21478. If this lunatic project is to go ahead at all, it must be with refined oil through double-walled pipe to double-hull tankers and to Prince Rupert, not Kitimat. Expensive maybe, but if the Chinese government wants it badly enough, then they can pay for it with their cash, not with our environment.
21479. Thank you.
21480. **MEMBER BATEMAN:** Ms. Huntington, thank you for joining us today. Please begin.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. BARBARA HUNTINGTON:**

21481. **MS. BARBARA HUNTINGTON:** Good afternoon. My name is Barbara Huntington and I live on Vancouver Island, a few metres from the water's edge.
21482. I am adamantly opposed to this tanker traffic in these waters and to a pipeline being built across the middle of this province. I do not want to walk along the shore and see birds, animals or fish gasping for air, coated with oil and lying dead or dying. I don't want to be assaulted with images of the same on the evening news.
21483. I wonder if the people in charge of these projects today are too young to remember the devastation caused by the Exxon Valdez. This accident has never been cleaned up and the damages awarded to the property owners affected



**Oral statements**  
**Exposés oraux**

were reduced and reduced again, and I don't know if they've ever been paid off.

21484.           So we all know that an accident will happen. In fact, it will probably be the first ship out of the gate that gets into one.
21485.           Also, the damage that will be caused by building a pipeline over mountains through forests and over rivers, not to mention what a leak in the line would do, doesn't bear thinking about.
21486.           If the bears, the elk, the cougars, et cetera, had a vote, this would never happen. But they don't have a vote and it is our responsibility to protect them. A pipeline would essentially be cutting off the animals' living room from their kitchen, and this is not just a pipe going through the wilderness. It will come with a road and support facilities. It could make the TransCanada Highway look like a country lane.
21487.           The risk assessment on these projects is probably something on the line an accident or leak will probably cost millions of dollars, but we'll be making so many billion dollars that a million dollars is nothing. Plus, a 15 percent cleanup is deemed to be good enough.
21488.           And the crazy part of this whole project is that we don't need this stuff. If we needed it, we wouldn't be piping it off to Texas or shipping it to Asia. We would be refining it right here and using it here.
21489.           But maybe our children's grandchildren will need it, and maybe by then they will have figured out a way to get the tar out of the sand without polluting all the rivers and streams within a 1,000-mile radius. And maybe by then they will be able to refine the stuff on the spot.
21490.           I know it is difficult to be interested in your grandchildren's grandchildren. They are too remote. Few of you will ever know them, but somewhere in our ancestry there was a person who made a wise move, and that has allowed us to live in this beautiful province. And now it is our turn to make a smart decision. Tell these unborn children we didn't sell everything. We left a little something for you. Think of it as a legacy and feel good about it.
21491.           Thank you.
21492.           **THE CHAIRPERSON:** Thank you to each of you for taking the time

to be here today and to present your oral statements to us.

--- (A short pause/Courte pause)

21493.           **THE CHAIRPERSON:** Good afternoon.

21494.           Ms. Jordan, please go ahead with your oral statement.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. JEAN JORDAN:**

21495.           **MS. JEAN JORDAN:** Good afternoon to all of you. My name is Jean Jordan. I'm an educated -- or retired educator, consultant and business owner. And I would like to thank the Panel, and address the Panel with three statements; one personal, one provincial and one planetary because everything is connected.

21496.           Firstly personal: When I was 18 I was raped. When I was 18 I weighed 105 pounds and my attacker weighed approximately 250 pounds. Why do men -- and it is usually men who are powerful with either physical strength or money, why do they ignore the word no? We've all heard it before. No means no.

21497.           A few years ago my cousin wanted to be build a boat shed on a large vacant lot in his rural neighbourhood. The owner of the lot said no. The neighbour was not using the lot. The boat shed would not bother anyone. The owner still said no. No means no.

21498.           My cousin could not build the boat shed. But at least he did ask the owner for permission. Has Enbridge asked the First Nation caretakers of northern B.C. for permission to construct a pipeline?

21499.           The Idle No More movement is addressing this very same concern. And I feel that I know how the indigenous people of Canada feel when they are continually ignored and disrespected when no does not seem to mean no. And no one is consulting with them over legislated changes to their very livelihoods and way of life. When the majority have said no but the projects continue, when "no" no long means no is rape too strong a word to use?

21500.           Secondly provincially: There are three issues here which concern all British Columbians, Treaties, pipelines and tankers. The Panel knows by now

- that most First Nations of B.C. have never signed Treaties with any government. That means no government of this country or province or any jurisdiction can give Enbridge or anyone else permission to put a pipeline or any construction across northern B.C.
21501.           Until Treaties are signed by the First Nation caretakers of the lands and waters of B.C. then the Government of Canada or the Government of B.C. have no constitutional right to give anyone permission to build anything here. No means no.
21502.           The majority of the people of coastal and northern B.C., especially those who are First Nations, have said no to pipelines and exploration of their territories. No means no.
21503.           We the majority of the people who live on the west coast of B.C. do not need or want a pipeline because we refuse to allow oil tankers on our coast. And if we will not allow tankers along the coast then we certainly will not require pipelines. No means no pipelines. Everything is connected.
21504.           Why would we risk any damage at all to the largest intact coastal temperate rainforest in the world? Nowhere else on earth will you find the Great Bear Rainforest which covers an area about the size of Switzerland. This rainforest supports the life of thousands of people, animals and ecosystems. Economically it supports flourishing and growing businesses including ecotourism business, part of the present and future economy of B.C.
21505.           This is the 21<sup>st</sup> century. The rest of the world is moving quickly towards sustainable energy for the future. Why would we ever risk what is really valuable for the long-term, our dazzlingly beautiful pristine coast for the short term greed of oil corporations, a polluting, unsustainable source of energy. No honest, intelligent economist in the world would even suggest such a thing. No honest intelligent economist would base a country's entire economy on a non-renewable resource.
21506.           Remember the story of the goose who laid the golden egg. Remember the lesson she taught. For thousands of years this west coast rainforest and its waters have sustained the life and livelihoods of thousands of people with food, shelter, clothing, work, transportation, art, culture, and this will continue for thousands of years more, but not with oil tankers.

**Oral statements**  
**Exposés oraux**

21507. No means no tankers for three main reasons. Firstly, this coast already has Mother Nature's risks to deal with, including the Ring of Fire which refers to the active earthquake zone circling the Pacific.
21508. In the past two weeks we have had two small, but felt, earthquakes off our coast. The danger of a major earthquake with an accompanying tsunami in the foreseeable future is a very real possibility. Keep in mind the example of what happened in Japan just over a year ago.
21509. Secondly, with man-made climate change we are seeing much more severe weather events everywhere on earth. In 2012, the U.S. had 14 highly costly disasters directly related to man-made climate change, with hurricane Sandy being the latest.
21510. Thirdly, even without severe weather events sailing through Hecate Strait, the main navigable channel along this coast, is a hair-raising experience. I hope all Panel Members have seen the YouTube video "Tanker in a Storm". Trying to navigate a huge oil tanker through Hecate Strait is more than risky. It's a disaster waiting to happen, and that's why so many wise people are saying it's not if but when.
21511. The description of Hecate Strait that I condensed from "The Golden Spruce" by John Vaillant, published by Vintage Canada in 2005, a couple of the paragraphs that I have included here were read by the previous speaker or the previous panel -- one of the speakers there in the previous panel. So I'm going to skip out a little bit here. But I'll just use the first sentence and the last paragraph:

*"Hecate Strait is arguably the most dangerous body of water on the B.C. coast. It is a malevolent weather factory. On a regular basis its unique combination of wind, tide, shoals and shallows produces a kind of destructive synergy that has few parallels anywhere else in nature. I used to live in Kitimat. I arrived there by ship and I know how rough those waters can be even on a calm day."*

21512. I'll skip that part. And I'll skip the part about the height of the tides and the dramatic increase in pressure and flow with two tides a day.

*"But the third ingredient is a frightening thing called an overfall which occurs when wind and tide are moving rapidly*

**Oral statements**  
**Exposés oraux**

*in opposite directions. Overfalls are steep, closely packed, unpredictable waves capable of rolling a fishing boat and driving it into the sea bottom. Their effects are intensified by sand bars and shoals like the ones that extend for 30 kilometres off the north end of Haida Gwaii between Masset and Prince Rupert.*

*Under certain conditions, overfalls take the form of blind rollers which are large, nearly vertical waves that roll without breaking. Not only are these waves virtually silent, but under poor light conditions they are also invisible until you are inside them. The result is one of the most diabolically hostile environments that wind, sea and land are capable of conjuring up." (As read)*

21513. End of quote.
21514. Finally, I would like to make the point that Mother Nature always wins, and always will. Planet Earth can survive without us, but we cannot survive without Earth, a healthy, balanced green Earth. Other species can probably survive, but not mankind.
21515. Yes, right now Canada still needs dirty tar sands oil, in smaller quantities, though, and only until we catch up with Europe and other advanced countries around the world where modern technological inventions are developing all sorts of new power sources.
21516. There are villages in Europe that are totally self-contained, almost, with power. We need to be scaling back, not pressing forward, with the activities in the tar sands.
21517. As Canadians, we have not explored nearly enough the alternatives to oil for green energy and power. Many European countries are so far ahead of North America.
21518. For example, did you know that Norway's economy grew by more than 40 percent last year using green technologies? Did you know that in Spain, the use of electric high-speed trains between cities has cut their overall carbon emissions by nearly 60 percent?

**Oral statements**  
**Exposés oraux**

21519.           **THE CHAIRPERSON:** Ms. Jordan, your time is up. Could you summarize in a couple of sentences?
21520.           **MS. JEAN JORDAN:** Yes, one final.
21521.           **THE CHAIRPERSON:** And at the time, while I've got you interrupted, I just wanted to thank you very much for recognizing the fact that there isn't a need to repeat something that a previous speaker has said. That's very helpful to us. Thank you for doing that.
21522.           **MS. JEAN JORDAN:** Finally, do we have a moral obligation to take action to protect the future of a planet in peril? Yes, I believe we do. Yes, for the survival of humankind and for the sake of our children and grandchildren, yes, for the sake of all forms of life on this planet and yes, because our moral integrity requires us to do what is right.
21523.           **MEMBER MATTHEWS:** Great. Thanks a lot, Ms. Jordan.
21524.           Ms. Kilthei, please go ahead and share your views with us.
- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. JANE KILTHEI:**
21525.           **MS. JANE KILTHEI:** Thank you.
21526.           My name is Jane Kilthei. I'm the Registrar and Executive Director of the College of Midwives of B.C., and I'm a retired registered midwife. I live in Cowichan Bay on the east coast of Vancouver Island, where Cowichan tribes, the largest of B.C.'s First Nations, have fished and lived sustainably for generations.
21527.           Cowichan Bay is also home to a sustainable small boat fishery. My neighbour makes his living fishing for salmon and spot prawn in the waters up and down the B.C. Coast.
21528.           While Cowichan Bay is a ways from Kitimat, we are all connected by the waters that stretch from Haida Gwaii down into the Salish Sea and up into the vast watershed of the Great Bear Rainforest.
21529.           An accident in the stormy island-strewn Douglas Channel is a huge risk, but a single oil spill from the pipeline or an oil tanker in any of these waters will have a devastating impact on both First Nations and commercial fishers,

- including those from my community.
21530. I live right on the Cowichan estuary, one of the largest intertidal estuaries on Vancouver Island. I've spent many hours exploring the estuary with my daughter, who's now studying to be a wildlife biologist. It's a place I love.
21531. Much of the incredible diversity of life it supports is beneath the surface, not easy to see. I've spent the last two years as a Board member of the Cowichan Land Trust working to create an interpretive centre on the estuary that offers a window into this amazing ecosystem for schoolchildren, locals and tourists.
21532. In the process, I've come to learn firsthand about the huge economic benefits of nature tourism in British Columbia, benefits that this project would put at risk.
21533. While B.C.'s estuaries make up only 2 percent of our coastal waters, they are more biologically productive than our best farmland. More than 300 species of birds, 80 species of fish and shellfish spend at least part of their lifecycles in our estuaries, along with 300 species of invertebrates.
21534. Estuarine eel grass meadows provide the protective nurseries that young salmon and herring fry depend on, while sequestering carbon from the atmosphere.
21535. The complex conditions under which these valuable and biologically rich estuaries develop make them very vulnerable to disturbance. Oil spills spell disasters, and we have many estuaries up and down our coast, both the coast of the mainland and on Vancouver Island.
21536. Like the Cowichan, the Kitimat estuary provides critical wildlife habitat, supports both the food and sports fishery and provides many local benefits. While the whole B.C. Coast would be affected by an oil spill, the potential for complete devastation from a diluted bitumen leak or spill in the Kitimat estuary is especially high because it is imperiled by a triple threat. Disaster can come from an upstream pipeline rupture, spillage at the nearby tank farm or collisions or groundings from supertankers.
21537. Contrary to statements Enbridge has made, many experts believe that the impact of an oil spill or leak would be especially devastating to the Kitimat

- estuary and could not be mitigated.
21538.           These immediate local and regional dangers that would come with building this pipeline are serious enough, but these dangers pale in the face of the danger all of us face if that diluted bitumen makes its way across the Pacific Ocean to be burned in Asia. The climate science grows clearer every day. Burning that oil will guarantee the destruction of the only planetary life support system we've got.
21539.           I've studied a critical appraisal of research in my training as a healthcare professional. I've read the peer-reviewed climate literature. Credible, conservative climate scientists now tell us we have very little hope of keeping global temperature rise to the 2 degrees Celsius put forward by the IPCC as the safe level for humans on this planet.
21540.           Many scientists believe that the real temperature boundary to avoid major climate tipping points is closer to 1.5 degrees. We are already witnessing the weather extremes of a destabilizing climate in every corner of the world, with increasingly catastrophic human costs at least than 1 degree of post-industrial warming.
21541.           The science tells us that humans can pour roughly 565 more gigatonnes of carbon dioxide into the atmosphere by mid-century and still have some reasonable hope of staying below 2 degrees. Reasonable, in this case, means four chances out of five, or worse odds than playing Russian roulette. Yet globally, we have 2,795 gigatonnes in proven global coal, oil and gas reserves. This is five times as much coal, oil and gas as is safe to burn.
21542.           We need to keep 80 percent of those reserves locked underground in order for our children, much less our grandchildren, to have a planetary home that supports human life in any way recognizably close to the life we now know.
21543.           We must live within that 565 gigatonnes carbon budget, or the result will be disastrous. What this means is that we can't build this pipeline or, in fact, any new fossil fuel infrastructure of any kind.
21544.           What we know historically is that when we humans build infrastructure, whether it's a pipeline or a highway, we will use it, whether it kills us or not. The time left to transition away from fossil fuels and prevent runaway climate change is incredibly short. We have only a few years to make significant



**Oral statements**  
**Exposés oraux**

- changes. It will be an enormous challenge, but it is our only hope. This pipeline is a pipeline to climate catastrophe. This is the biggest reason this pipeline must not be built.
21545. I've worked as a midwife for much of my life, supporting close to 1,000 mothers in giving birth to their small sons and daughters. Many of them are now grown into young adults and starting their own families. I think of them and I think of my own children, how the track to climate destabilization that we are now on will turn their lives into a struggle and a misery, how their children may have no future at all.
21546. For the last 15 years, I've worked as the registrar of the College of Midwives B.C. As a health regulator, my mandate and that of my organization is set out in B.C. legislation. That mandate is to protect the public, to make sure that midwives who take care of B.C.'s mothers and babies are qualified, safe, competent, to ensure there are standards for the safe care of those mothers and babies and that those standards are met. I think this is not so different from your job as a Review Panel.
21547. I understand you have not been given the mandate to consider the climate impacts of this project, yet as the body tasked to assess its environmental impacts, how can you not. In the face of what we know about the current pace of climate change, the local impacts of transporting oil cannot be separated from the global impact of burning that oil any more than running the trains through the concentration camps in Germany in the 1930s and '40s could be separated from what happened there.
21548. I'd like to end with these words from James Saiers, who was a former dean of Yale's School of Forestry and Environmental Studies, who opened a climate conference saying, "The only thing we have to do to be sure that we leave a ruined world for our children and grandchildren is to do exactly what we are doing now".
21549. Please say no to this pipeline.
21550. **MEMBER BATEMAN:** Mr. Mackenzie, you're our last speaker on this panel. Please begin.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. BRUCE MACKENZIE:**

21551.           **MR. BRUCE MACKENZIE:** I'm a native Canadian with a pension plan and investments and a lifetime resident of Vancouver Island. I worked as a climate change analyst in the B.C. government and I've been active with the B.C. Sustainable Energy Association. But I don't speak on behalf of anyone here today.
21552.           I do not consider myself a radical or a jet-setting celebrity and I'm not funded by any foreign special interest groups. I do not oppose all major projects and do not plan to sue anyone to delay this project.
21553.           Am I close enough to the mic? Great.
21554.           I do very much appreciate the opportunity to give my oral statement as a Canadian citizen to you on the Panel.
21555.           I care deeply about the ocean around Vancouver Island and I'm sure you will hear from many others concerned about risk to our coast. So today I plan to speak about the economic feasibility of the proposed facilities and how there's a significant risk the pipeline could be turned off.
21556.           I won't repeat what the previous speaker, Jane, spoke about the numbers from Bill McKibben's article "Global Warming's Terrifying New Math" about two degrees Celsius, the 565 gigatonnes of CO<sub>2</sub> that we can put into the climate, and hopefully stay below that, and the 2,795 gigatonnes that are already committed in proven coal, oil and gas reserves of fossil fuel companies.
21557.           The key point is that this number, 2,795, is five times higher than 565. So according to McKibben, that represents something like \$20 trillion in corporate assets and it's baked into the share prices of the companies extracting oil in the Athabasca now.
21558.           So it seems to me there's two ways forward from those three numbers. We either continue burning hydrocarbons around the world at the present increasing rates, and some peer reviewed estimates project that will lead to locking into a six degree warmer world by the year 2100. I won't take time today to outline what a six degree warmer world would look like, but the book "Six Degrees" by Mark Lynas does. It includes things like billions of people would find themselves in areas of the planet which had become essentially

uninhabitable.

21559. Now, I'm not asking you folks to rule on global climate change. You're in no position to get the IPCC moving or to re-invoke the Kyoto Protocol. I understand that. But there is another pathway. World opinion changes. Perhaps we'll see this coming and a consensus will build that we have to stop. It's hard to predict when this would happen, but we've seen substantial changes in other global issues like nuclear disarmament, land mines, the ozone depleting chemicals. We have a treaty for that that work.
21560. If this actually happens, if we can build a consensus to actually reduce greenhouse gas emissions to save civilization, the world will be looking for ways to generate energy with much lower carbon footprints.
21561. How does this affect the Gateway pipeline? I'll get there.
21562. In 2006, the Stern Review called climate change the greatest and widest-ranging market failure the world has ever seen because those who make a profit from burning fossil fuels don't pay for the costly consequences of exhausting the greenhouse gases in the atmosphere. What's the solution to that? Even the Canadian Council of CEOs, the Canadian Chamber of Commerce have endorsed a price on carbon to incent industries and consumers to curtail their greenhouse gas emissions and force efficiency into the supply chain.
21563. California started its industrial cap and trade system just this month. And as you know, B.C.'s had a carbon tax now for five years and an election was won on the carbon tax here in B.C. Your economic analysis on this pipeline should include a price on carbon emissions.
21564. About a year ago in Prince George, Chris Peters showed you on this Panel an analysis of energy return on energy invested of 2.41 for the oil plan to flow through this pipeline. I phoned him yesterday and he said that he hasn't heard anything that would refute those numbers, that he kind of was waiting for it but it hasn't happened, and as far as he knows Enbridge itself has not provided an analysis of that type.
21565. So energy return on energy invested, to remind you, is the amount of energy that you get out of each amount of energy that you put in. That is, for every joule of energy invested in extracting, transporting and refining the oil, about 2.41 joules come out of the refinery in China. That's the 2.41 EROI ratio.

**Oral statements**  
**Exposés oraux**

- This compares to about 14 for conventional oil. And the EROI of a wind turbine or solar cell is far higher if the calculations are done in the same way. We don't have time to get into that here.
21566. So the oil this pipeline will transport needs about six times as much energy to extract and process it as conventional oil and far more than renewables.
21567. If my scenario 2 occurs, if the world decides that we don't want to end civilization, humanity -- if humanity decides to step back from the brink by pricing carbon emissions, it would be projects like the Gateway and the oil sands, which will be the least economic from the point of view of energy return for greenhouse gas emitted.
21568. This pipeline is one of the riskiest ways to transport one of the world's most carbon intensive fuels. It would be an early one to shut down.
21569. Your Panel is only here to evaluate the effects of the Gateway pipeline, but my message could be similar for other high carbon fossil fuel developments. We're risking the future Canadian economy by putting so much capital into oil extraction when it's very possible the world will eventually wake up and resist it. If that happens, those investments will be dead money with no return.
21570. You've heard from many experts on the potential damage of even building this project, such as loss of exceptional wilderness areas and landslide risks along the route.
21571. It would be tragic to take on these risks if the pipeline had to shut down due to the high-carbon footprint of its supply chain a few years down the road. I hope that your decision on the public future, public convenience and necessity of this project will include the possibility of a global price on carbon to preserve our civilization.
21572. This pipeline is affecting me and our Minister of Natural Resources has accused me as a participant in these hearings of being foreign-funded and ideological. There's an air of desperation in our government's attacks because they have encouraged unlimited expansion of the oil sands without a plan for where the oil would go.
21573. I hope you recommend that this pipeline should not proceed until we

**Oral statements**  
**Exposés oraux**

have a national energy strategy which includes a price on carbon emissions.  
Thank you.

21574.           **THE CHAIRPERSON:** Thank you to both of you for being here to present your oral statements today.

--- (A short pause/Courte pause)

21575.           **THE CHAIRPERSON:** Mr. Manly, please proceed with your oral statement when you're ready.

--- **ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. PAUL MANLY:**

21576.           **MR. PAUL MANLY:** Sure. My name is Paul Manly. I was born and raised on Vancouver Island here. I don't have a prepared written statement. I'm just basically speaking from the heart, from the top of my head. So thank you for this opportunity to present to you and thank you for listening.

21577.           I'm opposed to this project, the Enbridge pipeline. I'm opposed to tanker traffic on the west coast of British Columbia. I'm not -- haven't taken any money from foreign environmental groups, nor have I been swayed by them.

21578.           I think that the mainstream media speaking about the Enbridge record has done enough to convince me that my conviction against this project is well founded. And I'm here really to speak for my children and my family.

21579.           I have an adopted family in Kitimaat Village. My sister is Haisla. She was adopted into my family when I was a child, and I was adopted by her family and I spent lots of time in the Kitimat area. I've fished in the Douglas Channel. I've harvested seafood in the Douglas Channel. I've seen how the weather can change quickly there and I've seen what the weather can do.

21580.           I've also seen what incremental contamination can do and has done to that area. I mean, there's the risk of a catastrophic spill in Hecate Strait or in the Douglas Channel or a major pipeline rupture as has happened in Kalamazoo, Michigan. But the incremental spills and contamination that we see at places like Westridge Terminal over in Burnaby where there's consistent dumping of, you know, 1,000 litres here, 1,000 litres there. I think in the last -- since 2006, in the Lower Mainland, Kinder Morgan has spilled almost a million litres of crude oil, and that, you know, wasn't bitumen with the toxic dilutes that we're going to be

**Oral statements**  
**Exposés oraux**

- seeing with what comes from the tar sands, which I understand to be much more toxic, much more carcinogenic and much more dangerous for people to be inhaling and breathing when there is a spill because of the way it dissipates into the air.
21581. But I have seen -- I know that in Kitimat, they lost their eulachon run, and that was based on incremental contamination. There wasn't anything catastrophic about the way that that contamination happened.
21582. And the eulachon were a very important fish for the Haisla people. They based a lot of their life around that fish. They used it for lighting in the winter, for food, for fuel, for trading with other First Nations.
21583. I also know that the Coastal First Nations have signed a declaration against tanker traffic, supertanker traffic of crude oil on the West Coast, and I know that the First Nations along the Fraser River have signed the Fraser Declaration. And these are all First Nations that have not ceded their territory. They have not signed treaties. And under section 35 of the Constitution, they have the right to create their own laws and they have created these laws and they must be respected.
21584. And so I stand with them in solidarity with the First Nations that have signed these declarations and I oppose this project.
21585. There's -- economically, this project doesn't make sense. You know, of the three NAFTA countries, Canada is the only one that does not have a national energy security plan. We see in Mexico they have a Mexico First policy. In the United States, they have an America First policy and they have a national energy security supply that will last them a year and a half. In Canada, we have no such thing. And we are the coldest of the three NAFTA countries.
21586. I've heard, you know, lots of other presenters talking about things like climate change, which is something I'm very concerned about for my children and, you know, future generations. This is something that we're already seeing and the effects of it are disgusting and gross.
21587. I think that we need to take these things into consideration when we are looking at these projects. And the tar sands represents a carbon time bomb, and we have the opportunity to keep that carbon in the ground or to set that bomb off and destroy the lives of future generations and create a living hell here on

- Earth.
21588. And, you know, as people of conscience, I think that we need to make decisions based on future generations and not just on the greed, short-term capitalist gains of corporations who want to exploit resources.
21589. If we have, you know, spills in rivers, you know, into the rivers and tributaries that go into the Fraser River that damage the water supply, that damage fisheries, I'm sure corporations will find a way to capitalize on that by selling us bottled water or farmed fish.
21590. And, you know, there's always lots of benefits, as we've seen from Naomi Klein's analysis of disaster capitalism that money can be made from disasters and that disasters are good for the GDP, the gross domestic product that, you know, when the Exxon Valdez accident happened, the GDP went up.
21591. But those economic measures are not economic measures that take into consideration, you know, the future of humanity and the future of this planet and the future of the other beings that we share this planet with.
21592. And we have a responsibility as human beings to make decisions that reflect future generations and the other beings that inhabit this planet with us. This rock will continue hurdling through space well into the future, but it's up to us to determine whether there will be humans inhabiting this planet in a way that we enjoy today.
21593. And so I understand that, you know, this is a cabinet decision. Ultimately this is a political decision and whatever you decide can be overruled. I think that's highly unfortunate. We've seen that this Conservative government has their heart set on selling out our resources as quickly and fast, you know, as fast as they can to whoever the top dollar might happen to be, but it's incumbent upon us to stop that.
21594. And so I appreciate, you know, your taking the time to do this and to listen and to evaluate what you've heard. I know you've heard a lot of very good information, a lot of statistics and facts and figures from a lot of intelligent people who have done a lot of research and I'm -- I'm hoping that you take those things into consideration and decide against this project.
21595. And if the Harper Conservatives decide to overrule your judgment

**Oral statements**  
**Exposés oraux**

then that will be something that will ultimately be dealt with politically and, you know, I know you don't want to talk about potential civil disobedience or anything else, but I -- I know that people in this province feel very strongly about this issue, First Nations feel strongly about this issue.

21596. We need to stand for future generations and not just the bottom line and -- and, you know, anybody who's got money invested in pension plans, has money invested in the tar sands and so we are all soaking in it, but we need to -- we need to have a reality check and be a little more honest with ourselves.

21597. So thank you for your time.

21598. **MEMBER MATTHEWS:** Great, thanks a lot, Mr. Manley.

21599. Mr. Martin, I see that you might have something to show us. If -- if you could, for the people on the webcast, can you describe it so that they get an idea what it -- what it might look like.

21600. **MR. TOM MARTIN:** I shall do that.

21601. **MEMBER MATTHEWS:** Okay, so go ahead please. Thanks.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. TOM MARTIN:**

21602. **MR. TOM MARTIN:** I wish to acknowledge the Coast Salish peoples and I want to thank you as Members of the Panel for patiently listening, thank you. And I also want to thank members of the public who I figure are out there somewhere, I can't see them but thanks to them for listening too.

21603. My name is Tom Martin; I live in Victoria. I'm a retired microbiologist and I'm a very concerned Canadian citizen who is opposed to pipelines that carry thick gucky stuff and toxic solvents.

21604. When I was a young teenager I lived in Ireland and each September, a truck which we called a lorry, came to our home and dumped a load of coal in the backyard. My brother and I were assigned the job of shoveling the coal into a wheelbarrow and taking it to the coal shed beside the garage. Two or three times a week we filled a coal scuttle and took it either into the kitchen to fuel the cooker or to the fireplace in the living room to keep us warm.



**Oral statements**  
**Exposés oraux**

21605. All our neighbours did the same thing. It was common practice at that time and nobody questioned whether this practice was harmful, either to our own health, or if we were harming the atmosphere. Yet, if we had been paying more attention there were certain clues. On cloudy foggy days the air in the city made us cough. The smoke from the chimneys and homes and factories hung low in the air.
21606. In those days, the trains were fuelled by coal and I remember being curious, curious enough to put my head out of the window of the train and immediately getting a piece of soot in my eye from the steam engine and that soot really stung.
21607. No doubt I also inhaled some of the particles of soot and some of them may have bypassed my ciliated epithelial cells and got lodged in the alveoli of my lung. In those days I had never heard of ciliated epithelial cells or alveoli.
21608. Now, we tell ourselves we didn't know any better. And anyway, there were no alternative ways to keep warm or to cook dinner. That was the late 1940s. Fast forward to 2013: Has the story changed? The nature of the fossil fuel may have changed for some of us, but even though we know about clean and renewable energy sources these days, has the story really changed?
21609. In 2008 I travelled to Fort McMurray and later on to Fort Chipewyan where I spent three days in the community there. Fort Chipewyan is a community of 1,200 people as I'm sure you know, and it's located at the point where the Athabasca River flows into Lake Athabasca. This is the same river that flows nearby the enormous tailings pond on one of the oil plants -- at one of the oil plants on Route 63.
21610. Twice each day I passed the cemetery where too many people have been recently buried. But these are facts that are now well known even as their connection with the tar sands continues to be denied by many in authority. Denial is a characteristic of the left hemisphere of our brains.
21611. Let me take a leap here because my time is limited. Throughout recorded history there have been periods of time, sometimes prolonged, when entire societies have been unable to see what was clearly before their eyes.
21612. Our society is not the first to have fallen into that trap. North American culture, including Canadian culture, is currently dominated by the left

**Oral statements**  
**Exposés oraux**

- hemisphere of our brains. For example, the making and use of tools and machines like the motorcar is represented in the left hemisphere of the brain. The world of the left hemisphere is competitive, it's specialized and it's narrowly focussed.
21613. The oil industry is left brained. The oil industry thinks about drills, excavators, pipelines, tankers, cars, trucks and anything to do with the internal combustion engine. And of course, it thinks about money and grasping and getting money, a left brain function.
21614. We all have and we all need the left hemisphere of our brains, but if we ignore, downgrade, negate, fear or fail to use the right hemisphere of our brains we become unbalanced both as individuals and as a society. We need to balance our right brain and left brain functions and actions.
21615. Our right brains help us to be more broadly aware, more open to others, more empathetic with those around us. In short, our right brains see the big picture.
21616. My presentation today is a plea to use both parts of our brains. When I went to northern Alberta in 2008, there were 25 oil companies involved in oil sands projects there. Now there are, I think, 59 companies at 126 sites. Something has got seriously out of balance.
21617. Unfortunately, our left brains can get us stuck so that we can only think of doing more of the same. And, of course, if we keep extracting more and more oil in whatever form it is present, we naturally have to think of more ways to move it, meaning more pipelines, more tankers, with all their associated hazards.
21618. Meanwhile our right brains warn us that as we become more unbalanced we become more unhealthy and we destroy more and more of what ultimately sustains us, planet earth.
21619. And that's where my visual aid comes in. When I look at this picture I want simply to say it's a picture of earth from space. And for me, the earth is sacred and the reason for that is very simple because neither you nor I would be here if it wasn't for the earth. The earth is very special.
21620. We humans and our brains make us the most powerful and yet the most destructive of all animals. But if we destroy our environment, we destroy

ourselves, not a good idea. We have right brains and left brains for a purpose. Let's use them both.

21621. If we listen to both parts of our brain, we will say "no" to the Northern Gateway pipeline. Thank you for listening.

21622. **MEMBER BATEMAN:** Ms. Thompson, thank you for coming and for offering your point of view to assist the Panel. Please begin.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. SHARLEEN THOMPSON:**

21623. **MS. SHARLEEN THOMPSON:** Okay. I am not associated with any environmental organizations or other interest groups. I've come on my own accord, but I am a boater and I've watched the seas around me change for the last 60 years.

21624. I grew up on the lower coast and played on the White Rock beach. When I return to that beach now, the beach is very different. The rich eel grass beds that I knew as a child are gone, replaced by sparse, brown, algae covered sort of eel grass beds that do not provide cover for young fish and crabs.

21625. I've watched the textures of the sand change from clean, grey sand to compact, slime-covered sand. In the last 15 years, I have seen the same thing happening in the Parksville beaches. I believe that we have to prevent this from happening to the mid and North Coast and to put more protection for the lower coast.

21626. I have also boated, kayaked, scuba-dived up and down the whole length of our coast. Most of the coast is uniquely pristine with rich biodiversity. Because of the ferry system and their cooperation with dropping off kayakers, sort of anywhere is acceptable to capable kayakers.

21627. Everywhere in this marine and coastal environment, I've seen warning signs of events that could threaten the marine traffic in Douglas Channel. The coastal mountains up and down the coast are all the same geological formations. Everywhere I have seen signs of slide activity. The slide sizes vary and many reach the sea displacing varying amounts of water. If they come down rapidly, they create mini to major tsunamis in the immediate area.

**Oral statements**  
**Exposés oraux**

21628. Natural Resources Canada says that they come down at rates up to 100 metres per second. That -- they also say that the most significant areas to slide are the marine glacial clays and sills that form in the shallow seas that have since been lifted up into the mountains as the mountains rebound from the weight of -- retreat of the last ice age and the subduction of the Juan de Fuca plate and the Pacific plate under our mountains creating our mountains.
21629. These types of deposits lie all around the Douglas Channel and many other areas on the coast. In the Skeena Valley, along the Skeen River, there was such a slide on November 28, 2003 that severed a gas pipeline and cut off gas supply to Prince Rupert for 10 days.
21630. I've wandered with village Elders on a site in Knight Inlet where there used to be a village that existed until the 1850s when the huge tip of a point slid off across their -- from their village. Not a single person survived, nor did any sign of the village remain. When these people did not show up at the next meeting point, other families began to look for them. Everything was gone.
21631. This is not the only place on the coast where this has happened. In Alaska, in Lituya Bay, some similar geological formations to the Douglas Channel, there's a mountain slide that -- a mountain that slides about every 200 years. These huge slides of rock fall into the sea. The last time this happened was July 9, 1958. The wave that was created washed the trees away, went up 500 metres off the opposite slope. That 1700 -- 1700 feet that wiped trees away which is how they measured it.
21632. It then moved down the Channel as a 200-metre high wave. By the time it reached the Channel entrance, it had decreased to a 30-metre high wave that wave still able to carry a fish boat over a sand spit, including over the tips of sitka spruce on the sand spit. The men on that fish boat survived, but all the fishermen on one of the other boats in the area did not survive the tsunami.
21633. The natives of Douglas Channel also describe big, local tsunami waves that have -- a wave event in their oral history. They tell of a landslide in Kitimaat Town site where a huge hunk of land fell off and into the sea, creating a huge ravine that still exists. They say that it killed all their slaves who were blueberry picking on that land at the time.
21634. In July 27<sup>th</sup>, 1975, there was an underwater slide in Kitimat Channel that caused a local tsunami. This tsunami was big enough to toss commercial

**Oral statements**  
**Exposés oraux**

- fishing boats onto the docks in both Kitimat and Bute Bay. If a wave like this were to hit a large tanker, it would flip it or drive it onto rocks in these narrow channels.
21635. I looked for research on this possibility. I could not find any. I talked to a Ph.D. candidate in geomorphology working on the central coast. He looked and could not find any research. He said there has been very little geomorphology work done on any part of the central coast.
21636. I looked at the Natural Resources Canada website and found other relevant information on glacial debris in the Coast Mountains. There are up to 200 metres thick of glacial debris hanging at all angles to the sides of coastal mountains. The website also said landslides are becoming more common with global warming, and the ground is holding more water because some of the permafrost is melting in the high areas in the summers and refreezing, increasing the likelihood of triggering landslides.
21637. It is interesting to note that the largest landslide ever to be recorded in North America happened last June the 12<sup>th</sup>, in an Alaska Panhandle near Glacier Bay. It did not reach the sea, but it covered an area a half a mile wide and 5.5 miles long on top of a large glacier.
21638. Landslides like this are easily triggered by tectonic events. There have been two major tectonic quakes in the last three months. One, a 7.7 magnitude earthquake under Haida Gwaii three months ago, and another 7.5 under the Southern Alaskan Panhandle a couple of weeks ago.
21639. This is a tectonically active area. There are major fault lines that run up the coast that cross Douglas Channel. There has been little research as to where the smaller new fault lines run in this area. Douglas Channel is at the north end of where the Juan de Fuca plate dives under the North American plate. It is also highly likely that there are many small fault lines. Perhaps the one in the village where the people vanished is on top of a fault line that moved.
21640. It is -- and any of these movements could trigger a landslide, or a rock fall, or an underwater landslide in Douglas Channel.
21641. I do not know what a tsunami-generated wave coming up the Channel would do to tankers, but I think about it also. There's no research.

**Oral statements**  
**Exposés oraux**

21642.           There is also another phenomenon that occurs in Douglas Channel because of the multiple valleys converging into Douglas Channel. You can get very sudden, unpredictable local and very strong winds that sweep down on the main channel. They are famous for flipping unsuspecting boats. If they hit a tanker on its side, it could sweep it onto rocks where it could flip and dump its contents.
21643.           Douglas Channel is just north of Princess Royal Island where tourists come to see Kermode bears. Any spillage in this channel would destroy sea life and returning salmon to the multiple rivers that support the people and the diverse bear populations of the area.
21644.           At the entrance to Douglas Channel is a set of islands that are some of the best kayaking in the outer coast. The Dewdney and Glide Islands, ecological reserve islands, are just starting to be developed as a kayak destination. They are pristine and full of intertidal life. They are closer to reach the Haida Gwaii and so are attracting new customers, having a shorter time. They could be a good example of tourism jobs that are developing in the area employing native populations in a sustainable way. It would be wiped out if there were to be an oil spill.
21645.           I strongly oppose any oil traffic in these pristine areas. I do not feel that you can get oil safely to the coast, but I strongly feel that crude oil should not be shipped out of this coast. We have not done enough research to know what the risks may be -- that we may be creating by jumping into this project. Our environment is more important. We have very little to gain and lots to lose. I do not want to lose the biodiversity in the mid-coast as we are losing the biodiversity in the Georgia Strait.
21646.           I'm not against all pipelines. A pipeline across Canada over more geologically stable lands to Quebec or Ontario would provide work there for Canadians and reduce the number of tankers coming into that coast as well.
21647.           Thank you for hearing my concerns, observations and thoughts on this important issue. Thank you.
21648.           **THE CHAIRPERSON:** Thank you to each of you for presenting your oral statements to us this afternoon.

--- (A short pause/Courte pause)

21649.           **THE CHAIRPERSON:** Good afternoon. Ms. Mikaloff, please proceed with your oral statement. Thank you.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. RENEE MIKALOFF:**

21650.           **MS. RENEE MIKALOFF:** Thank you. I would like to acknowledge the Coast Salish Nations on whose territories we sit.

21651.           Regarding this project, I have many concerns about the pipeline route and the marine component of this proposal, but I'll focus on two; terrain stability and extreme weather events.

21652.           I have some personal experiences to share with the Panel, as I worked as a forestry professional for 30 years in the northwest region and I'm very familiar with the upper, middle and lower Kitimat Valley, as well as other valleys along the proposed pipeline route. These areas contain some of the most unstable terrain I have ever encountered.

21653.           According to the Geological Survey of Canada, the Pacific coasts of Alaska and B.C. are characterized by a high risk of catastrophic tsunami waves caused by landslides.

21654.           As a matter of fact, two submarine flow slides occurred in the Kitimat Arm south of the aluminium smelter. One was in 1974 and the other one was in '75. They generated tsunamis 6.1 and 8.2 metres high, respectively. The latter one destroyed the Northland navigation dock and the new Riv Tow Barge terminal and damaged local marinas and boats.

21655.           I ask you, is this not a very risky location for a pipeline terminus and for a bitumen and condensate terminal? Could the construction of such a terminal initiate more submarine flow slides and tsunamis? My literature review indicates that these two events that I've spoke about may have been triggered by shoreline construction activities in the vicinity of those years.

21656.           In the Copper, Clore and Upper Kitimat Valleys, unstable bedrock slides and rock slides are common. Often I had to reroute my field work due to rock slides making roads impassible or I discovered a rock slide blocking a road at the end of my day and I had to radio for an equipment operator to clear the debris, which took many hours. Huge boulders cascading down a steep cliff or a

hillside onto a pipeline would certainly cause a rupture and, in this case, access with heavy machinery is at best problematic.

21657. Another concern I have is the numerous glacier marine sediment deposits along the pipeline route. Marine clays become very unstable when saturated with high levels of rainfall or flooded by fresh groundwater. This leeches out the salt, weakening the bond between the clay particles. The clay then loses its cohesion and turns into a consistency like thick soup, resulting in slides.

21658. While on a contract for the Ministry of Forests in the Cecil and Deception Creek drainages, I found a large increase not only in the number of marine clay slides, but also in their size, and stabilizing and re-vegetating these slides I was involved with. This proved really difficult as the clay dried out in the summer, became like concrete. The plants were not happy and we could not really re-vegetate those slides successfully.

21659. The pipeline route will encounter numerous areas of marine clay sediments, and the risk of a pipeline rupture from such a landslide is very high. I think Enbridge underestimates the risk of these slides and what they pose to pipeline infrastructure.

21660. Precipitation -- oh, wrong page. Many avalanche tracks exist along the pipeline route. Avalanches are natural disturbances that occur annually on steep or moderately sloped terrain. The proposed pipeline route crosses vast mountainous areas where the risk of avalanches rupturing pipelines is very high. I have often seen or heard avalanches in late spring as they roar down slopes with incredible force.

21661. A pipeline would never survive an avalanche, and repairing such a rupture would take a long time. Enbridge has no experience operating in this type of terrain and I am not confident that they could respond promptly.

21662. I'd like to also speak about extreme weather events.

21663. On November 1<sup>st</sup>, 1978 I was on a crew cleaning up a damaged fish creek in the Wedeene Watershed. Record rains fell that day and the day prior, resulting in nine inches of rain in 48 hours. Our crew was ordered to evacuate and we barely made it out, as all the forestry roads were washing out and small creeks turned into torrential rivers.



**Oral statements**  
**Exposés oraux**

21664. The highway between Kitimat and Terrace was flooded and traffic had to be rerouted. This weather event caused around \$20 million damage, resulted in 44 major washouts between Terrace and Hazelton, destroyed much of the railway between Terrace and Prince Rupert, and two CN workers were killed. The natural gas line along the Copper River was ripped out and most of the hydro lines were down.
21665. Communities were isolated without hydro or natural gas and it took over a week to repair the gas pipeline. In the back country, many creeks scoured out new channels and forestry roads and bridges were completely washed away. A pipeline rupture would not be repaired -- repairable for days or weeks under such flood conditions, as crews would have to wait for flood waters to subside.
21666. In October 2000, my friend was working in the Kitimat Valley when it rained one inch per hour and flooded the ground around her feet. She told me she and the crew left in time to witness the entire slope failing where they had been working half an hour before.
21667. A pipeline would have ruptured under those circumstances and a prompt spill response difficult to carry out, as access to the area would be blocked. Rain on snow events and subsequent flooding damage to infrastructure are becoming more frequent in this region as climate change results in wetter falls, winters and spring. Increased precipitation saturates already wet ground and destabilizes soil, causing mud and debris slides of catastrophic proportions.
21668. Heavy snow melts caused a tragic debris slide 10 metres deep at Legate Creek on May 28<sup>th</sup>, 2007, killing two people and closing the highway east of Terrace. Due to the instability of the slide, it was 24 hours before the crews were allowed to clear the highway.
21669. How would Enbridge deal with a pipeline rupture from a debris slide when it is so unstable that you can't access it safely for at least 24 hours? The time factor would also be increased if the rupture occurs in a remote location where there is no road access and no heavy equipment available.
21670. Precipitation extremes in the form of snow need to be considered. I lived in Kitimat for six years and in the winter it was common to shovel snow upwards from your roof. The Kitimat area has had many records of daily snowfall and that's statistically on the record, so I won't go into them. But I would like to ask how Enbridge has -- if they've considered how they would

**Oral statements**  
**Exposés oraux**

- repair a ruptured pipeline during a heavy snow event when visibility is zero, roads are impassable, aircraft can't fly and snowmobiles get stuck in whiteout conditions.
21671.           So why am I so opposed to this project? I have a vested interest in the ecological integrity of the Kitimat Valley, a place that I love and have devoted many working years to various silviculture and watershed restoration projects. Millions of dollars have been spent by federal and provincial governments to restore the biological productivity of the forests, fish and wildlife.
21672.           The proposed pipeline will cross 74 fish-bearing waterways in the Kitimat watershed where 15 fish species exist. People come from all over the world to fish there. The terrestrial and aquatic ecosystems are precious and contribute much to the local economy. This project is simply unsuitable for this watershed given the high risk of ruptures and irreparable damage that would occur from these.
21673.           This project is not in the public interest. There are too many ecological and economic risks and too few benefits.
21674.           I was married in Kitimat Village and stand with my Haisla and non-Haisla friends in strong opposition to the Enbridge Northern Gateway project. The risks to the quality of life in the area are too great and I do have a hope that since the Eurocan pulp mill has closed that the eulachons that were tainted from the pulp mill are now going to recover. So a pipeline wouldn't really assist in that thing, either.
21675.           I urge this Panel to reject approval of this project on the grounds that the pipeline route has too many terrain stability problems and a history of extreme weather events. These, combined with Enbridge's horrendous record of pipeline maintenance and spill response, are a catastrophe waiting to happen.
21676.           I wish to thank the Panel for the opportunity to present my views and share my concerns, but I do express my disappointment that the public and my community was not allowed to attend these community hearings.
21677.           Thank you.
21678.           **MEMBER MATTHEWS:** Great. Thanks for your presentation.

21679. Mr. Mikaloff, please go ahead.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. WILLIAM MIKALOFF:**

21680. **MR. WILLIAM MIKALOFF:** Good afternoon. I'd like to welcome the Committee to Victoria and I'd also like to thank the Coast Salish people for allowing us to participate on their land in this important hearing. Basically I'm here to express my concerns over the proposed Enbridge Northern Gateway Project.

21681. In the 1970s I moved into Kitimat, I lived there for six years. And then later I was employed as the Chief Engineer at Northwest Community College and we lived in Terrace for approximately 27 years. I presently reside in Victoria but I consider the Pacific Northwest my home since I've spent the majority of my life there and raised my family there.

21682. I do not intend to, you know, basically discuss any of the scientific aspects of this proposal because there will be more scientists being able to discuss those issues that are more familiar, but what I'd like to do is share with the Joint Committee some of my personal experiences of living in the Pacific Northwest.

21683. One morning -- I don't know if you've took the drive to Prince Rupert along the Skeena. But one morning I was driving along there early in the morning in the spring and I was looking over the Skeena River just before we were getting to the Rainbow Summit and I could see this huge curtain of white, and at first glance I thought wow I'm going into an incredible snow storm.

21684. But as I got a little closer and I looked it was hundreds of thousands of seagulls feeding on an eulachon run. And this goes to show you just on a single species how they utilize the Bulkley, Kitimat and Skeena watersheds.

21685. This is a very important fish river to both the locals in -- and also the entire beautiful province that we have here. It's an incredible river system up there. Eulachon, wild salmon and other fish are the primary resource of the coastal and interior First Nations, and also it's an essential component of their culture up there if you've spent any time with the First Nations in the Pacific Northwest. And the fish and wildlife resources there support a very large tourist industry that brings a lot of economic gain to that area.

21686. Another situation I was involved in, in November 1978 I was

**Oral statements**  
**Exposés oraux**

- employed by the Kitimat General Hospital as a Power Engineer, and one of the optometrists, in his rush to get back to Terrace because of the weather conditions, and knowing that he'd be able to fly out on the plane there, kind of left some of his equipment and his materials at the Kitimat General Hospital, and he phoned over and would say, "Would anyone volunteer to bring it over to Terrace".
21687.           So I volunteered to drive over to Terrace, and at that point 4 kilometres of the Kitimat River Highway had already been washed out. The blacktop had been removed, the under barrier, everything, gone for 4 kilometres. They blocked off the road, so I had to basically take an old logging road that runs parallel to the Kitimat River. And at that point a lot of the troughs in the road were full of water, I was quite surprised with the car sputtering that I got through.
21688.           And when I got to Williams Creek that was the first time I actually drove through the creek because it had undermined the highway and took out that portion of the highway and had to drop down and drive through the gravel bed back up. And when I got into Terrace going towards Mills Memorial Hospital I noticed on the Skeena River the water levels were so high they were only a few metres below those two major bridges that they have in that community.
21689.           The storms had ripped off these huge cottonwoods with their huge root systems and they were bobbing up and down like matchsticks in that river, and it was just fortunate that one of these huge logs had not gone down and come up and taken out the bridge at that time, which would have totally isolated the community of Terrace from the two sides.
21690.           So I guess that begs the question -- like, oh, anyways, so what happened is I eventually got back to Terrace because the RCMP had blocked off the road but I explained to them I had just got through and he let me get back, so I was the last person to get back into Kitimat and that community became isolated.
21691.           And this begs the question, in that extreme storm we lost bridges, we had avalanches, we had mudslides, communities were isolated for weeks until they brought the Bailey Bridges in, and it took a whole year for us to get back to stability when the concrete bridges and stuff were replaced. And at that point they had to expand all the creeks so that the -- so that hopefully this problem wouldn't happen again in the future.
21692.           And climatologists are forecasting the weather in the Pacific Northwest is getting to get more harsh due to the climate change so this should be

- considered.
21693. In my third experiences the inability to get into those communities during the winter months, numerous times I had to fly in Vancouver for business meetings and on the way back my plane was continually diverted into Prince Rupert or into Smithers, we were loaded on buses, the trip normally takes an hour and a half from Prince Rupert to Terrace, that trip took us over three hours to get back, there was a metre of snow.
21694. I remember one circumstance when we were going up a hill there was a logging truck in front of us, he couldn't make the hill, he was sliding backwards with his logging load and it was fortunate that he finally got stopped but he didn't slide into our bus.
21695. These are the extreme weather conditions of the Pacific Northwest. And I don't think -- no matter what kind of spill response Enbridge has there's no way that they're going to get crews in there. If anyone's done any research in that area knows it's totally impossible to get crews in there during those weather responses. Helicopters can't fly, planes can't fly, and the travel in and out on vehicles is almost impossible.
21696. And then lastly -- those are very small communities. I know from research that was done spill response is better done in large communities because they have the manpower to get out there and do that work.
21697. If -- you were in the Pacific Northwest you know it's an hour and a half from Prince Rupert to Terrace, another 45 minutes into Kitimat. It's almost a two-hour drive into Smithers. How do you get crews together, or anybody, in those small communities to get in there and do any major spill response.
21698. And then I noticed in my last experiments -- I participated in a pipeline proposal already. In 1977 Dr. Andrew Thompson chaired those meetings; hearings were held across the Pacific Northwest. The idea was that they were going to ship Alaska crude down the coastline, up the Douglas Channel, load it into a pipeline, ship that oil into Alberta and from Alberta into the Pacific Midwest -- American Pacific Midwest where they needed that oil.
21699. And in that time all the residents and First Nations were against that proposal and one of the main reasons is because one of the main reasons people live in the Pacific Northwest is the recreation activities that they involve in. They

**Oral statements**  
**Exposés oraux**

enjoy their fishing, they enjoy their hunting. There's very little, you might call, entertainment in terms like we have here, with many theatres and that sort of thing, so they rely on that outdoor activity for a stable mind because of the isolation that they live in. And those people were all against that pipeline in 1977.

21700.           And I beg the question what has changed, and I suggest nothing. You know the majority of residents in the Pacific Northwest are against this proposal, and I am against this proposal as well. And the risks from extreme weather conditions, very unstable terrain and Enbridge's horrendous record in pipeline maintenance and spill response are too numerous and totally unacceptable. And I would like to have you at this point not approve this project. It is a disaster waiting to happen.

21701.           And I thank you for your consideration listening to me.

21702.           **MEMBER MATTHEWS:** Ms. Singleton, thank you for coming today and to share your point of view with the Panel. Please begin.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. GENEVIEVE SINGLETON:**

21703.           **MS. GENEVIEVE SINGLETON:** My name is Genevieve Singleton. I would like to acknowledge that we are on Songhees traditional territory. I would also like to express my appreciation to each of you for being here today and listening to me and all of us and I don't envy your job and I really appreciate what you're doing.

21704.           I'd like to mention that every person I've talked to in the last few weeks since I'd begun to get really anxious about coming here and expressing that anxiety, has told me thank you for doing this and has said that I'm speaking for them as well. In the last couple of hours that I've been around here I've received 30 Facebook messages saying thanks.

21705.           What I'm here to say is that this proposal is not in the common interests of the public and should not be allowed to go forward.

21706.           I'm the mother of four children and I live in the Cowichan Valley near a creek which empties into the heritage Cowichan River. I won't repeat all the things that an earlier speaker, Jane Kilthei, spoke to about the Cowichan estuaries, but I will say one thing. I wrote these notes in my kitchen which is very close to

**Oral statements**  
**Exposés oraux**

- downtown Duncan, listening and watching eagles fly up my creek looking for salmon. The creek has been humming with activity as the salmon return from their treks far out into the ocean. Perhaps some of those fish travel to the areas where the tankers wish to ply.
21707. I grew up in Victoria and I spent -- I've spent 52 of my almost 60 years living on the B.C. Coast. As a child, I joined the junior naturalists in Victoria and with my mentor Freeman King, who the Goldstream Nature House is named after, I learned about nature. I spend most of my free time outdoors, most of my working time outdoors. Most of my big decisions in life have been made by taking some quiet time on a beach. I love our province. I love its forests, its beaches. It's what fills me spiritually.
21708. I work as a nature interpreter which means I teach children about nature. I also work with my husband as an environmental consultant. I worked in the B.C. Parks system as a naturalist all over Vancouver Island and also at Lakelse Lake Provincial Park north of Kitimat. And on the map, it's the second highest word up there above the turn -- the right-hand turn, Lakelse Lake. I built a nature trail there. It's a really special area.
21709. I know the Skeena Valley, Prince Rupert, Kitimat well. I've had the opportunity to go to Haida Gwaii a number of times. I have friends and family -- I had family living there, and probably she'll be moving back there. I have a daughter that attended school up there. The Haida Gwaii Semester, which is a program supported by UBC for third-year university students, she worked for the summer with a rediscovery program, lived on Skidegate Reserve and she probably will be working there this summer.
21710. Last summer I spent two weeks there where I was welcomed by the Skidegate community, taken out fishing. My first day there I was greeted with a bucket of crab and told to clean them and that was breakfast, and I was on my own and I've never cleaned a crab in my life. I ate there. I went to Aboriginal celebrations. I went to a pole raising. I went to many, many things. I was totally immersed in the culture as I had been on my other visits.
21711. I have visited areas of the Great Bear Rainforest and I know many of the beaches and areas along the B.C. Coast and Vancouver Island.
21712. I wear many hats. I've got many jobs, many qualifications, but the hats I wear today, talking to you, are simple. I'm a mom of four children. Maybe

**Oral statements**  
**Exposés oraux**

- I'll be a grandma someday. And I'm advocate for nature and children.
21713. The model for my naturalist -- local naturalist group is that we speak for nature since nature cannot speak for itself. I know that many groups such as BCNature, which I am an executive member of, have already provided their expert opinions. A few of the things they would have mentioned are the endangered woodland caribou, the 30 important bird areas that the tankers will pass, the humpback whales which have recently been returning in larger numbers near the Great Bear Rainforest. Those whales are dependent on eco-location which the noise of tankers will affect.
21714. Of course there's the Great Bear Rainforest. There's the 9,000-year old ancient glass sponge reef, one of the world's great wonders. All of these would be impacted by an oil spill or a leak.
21715. I'm deeply concerned about the impact that a bitumen spill would have on our fragile coast ecology. How do you clean a sea anemone of bitumen? With a teeny tiny brush?
21716. The Northern Gateway Project website informs me the chance of a large spill of 126 barrels is only likely in 2,800 years. I'm here to say that any risk is unacceptable. The hitting of the bridge in San Francisco a few days ago is a case in point. I'm sure no one meant for that to happen. I'm sure the captain didn't want to do that, but it did.
21717. We all know the story of the sinking of the Queen of the North. To me, the ferries were safe and invincible. I'll never forget being on the new ferry a few years ago and passing the place where the Queen of the North still lies to this day.
21718. In the news today, there's pictures of the sunken boat due to a new development in that problem. And I mean, it's just horrifying. I just hate being on boats now. I mean, that never should have happened. To this day, the fuel still lies below the water causing concern to the community of Hartley Bay.
21719. I've studied with Nancy Turner, a well-known ethnobotanist who does a lot of work with Hartley Bay residents. And they're an amazing community because they still are mostly using local food to live off. Yet, now they cannot harvest all the food they used to because of this pollution.



**Oral statements**  
**Exposés oraux**

21720. Other questions and concerns I have from my time up in that area are regarding the challenge of navigation of stormy waters, which you've already heard a lot about. But a few personal things I have is last January I put my daughter -- drove my daughter up to Port Hardy to put her on a ferry. And in my naivety, even though I should have known better -- I didn't check the schedule -- the ferry didn't go. The weather got worse. The ferry did not sail for days. I couldn't afford to stay up there. I had to leave her. That was due to bad weather.
21721. When I went to Haida Gwaii I would see the empty stores sometimes and there was nothing there except lots of mustard, but no milk because the ferries weren't coming in due to bad weather. I've got a pretty strong stomach, but I've been seasick a bunch of times up there.
21722. Why would the approximate 252 tankers that are travelling through this area be immune to these challenges? Multi-million dollar companies have deadlines to meet and chances might be taken to get these boats out on time to a client.
21723. I have concerns that my First Nations friends who would be impacted by the land and water routes be well-heard. We as -- myself, as white people, my heritage, we've colonized their lands. We gave them disease. We put them on reserves and we took away your children.
21724. It is interesting to contemplate that when a spill does happen -- and it will, only in a matter of time -- it'll be the First Nations who will be there to help us. And they are the ones who will be most impacted. But who else will turn up in these remote areas in a winter storm? Who else has the skills up there on the spot? Look at what happened in Hartley Bay.
21725. About food. My family and I eat fish, all harvested off the coast of B.C. We belong to a Cowichan Bay fish co-op. We patronize our local fish monger. And as past co-chair of the Cowichan Stewardship Round Table, I know a great deal about how depleted our fish stocks are and we should be taking more steps to look after them, not contemplating moving bitumen to areas that could wipe out precious fish runs.
21726. We need to consider the bigger picture of this, the oil sands in Alberta, the effect of climate change, the pollution recently sited in local lakes near the oil sands. I want to find a way for us to keep our oil in Canada, building our own refineries, conserving for the uses we still need it for such as medical equipment,

and continuing hard to find alternatives.

21727. In the Cowichan Valley we ship our logs away to China and we then find out we do not have enough jobs and resources for ourselves.
21728. I have concerns re the long-term point of this. How can we justify destroying land and ocean ecosystem, taking away people's food sources and their cultural and spiritual heritage over the short-term need to ship oil to China to be made into consumable things that then we ship back to Canada to be sold? And then we buy them. And then eventually when Christmas is over, we throw them into our landfills because we're tired of them.
21729. I am passionate about nature and connecting children to nature. That's my life. There have been many studies showing the importance of children and adults spending time in nature which reduces stress, depression and many other things. Children need places to be outdoors. They also need to feel secure and safe.
21730. I had the privilege of being invited to a kindergarten graduation in Skidegate last summer, in June. The children did traditional dances waving eagle feathers within sight of Hecate Strait. I was struck with the lunch provided; salmon, crab, seaweed, all harvested nearby. I was also struck with all the signs around the community from your recent trip that you had just taken up there and the little children wearing t-shirts saying that they were against Enbridge.
21731. It is wrong that those children are worrying about tankers coming into those waters. Children need to be kept safe. It is our responsibility to have our children not go to sleep at night wondering, will an oil spill happen and what will happen to daddy's fishing?
21732. Our children live with enough worries with the news, with climate change. At the end of the day, I want to do the best I can in the world for my children, the young children that I mentor and all children.
21733. I am here to say this project is bad for our children and future generations. We will not be thanked for destroying habitat by building another pipeline, by putting our coastline at risk.
21734. I would like to close my presentation with a game. And I was told I couldn't bring in the ball of wool I wanted to, but instead I'll take you to this

**Oral statements**  
**Exposés oraux**

- picture behind me that's been provided for me. And I want you all in this room to imagine being on that beach and we've been out doing a nature program together. Please imagine that you can hear the waves, the wind on your face and the calling of the gulls.
21735. I pass this ball of wool around you as a group. And each of you hold onto a piece of the wool and create this web between us. And each one of you would say something you saw, perhaps a gull, perhaps a crab, perhaps that funny hermit crab with its too big shell, perhaps the barnacle waving its tentacles.
21736. And we all stand together in this circle, holding on to our little bits of wool with this stretch of wool all spread out between us. We have fun throwing the ball and there we are, we're laughing.
21737. And then I say: "What does it look like" and somebody will say: "It looks like a spider web". And I'll say: "Yeah, it's the web of life." Then I'll say, "I'm an oil spill and I'm going to pull on my bit, put your hands up if you can feel it", and perhaps a child who is the eagle or the raven will put their hands up. And then I'll say, "Can you pull your bit of wool too" and eventually, all of us feels the tug of the wool.
21738. And then I'll say, "So, we're all part of the ecosystem. We're all connected. We're all part of the web of life." Then we'll put the web down on the ground, take a step back, and then we'll contemplate.
21739. And I ask you, Enbridge people, Panel staff, audience, media people to all consider that. For a second, we're standing on this beach holding hands and we're looking at this web of life and we know that we're part of it.
21740. Thank you for your time.
21741. **THE CHAIRPERSON:** Thank you to each of you for your oral statements this afternoon.
- (A short pause/Courte pause)
21742. **THE CHAIRPERSON:** Sorry about that. Good afternoon. Ms. Vernon, please proceed with your oral statement.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. CAITLYN VERNON:**

21743.           **MS. CAITLYN VERNON:** Is that on? It is.
21744.           I'd like to start by acknowledging that we're on Coast Salish territory, and also the two witnesses that I have in the room with me, Mary from the Heiltsuk Nation and my young friend Hannah who is here representing future generations.
21745.           I work for Sierra Club B.C. and in my work I have been very fortunate to spend time in the Great Bear Rainforest. When I sit in the Great Bear Rainforest and watch a spirit bear catch a salmon, it feels like an honour, a privilege and responsibility.
21746.           A privilege to witness these spirit bears that live nowhere else on earth, an honour to be welcomed into the territories of coastal First Nations, and a responsibility to keep oil tankers out of the world's largest remaining coastal temperate rainforest.
21747.           On one of my visits to Hartley Bay, the community of the Gitga'at First Nation put on an amazing feast, as they so often do. The table stretching down the middle of the big house was loaded with food from the ocean, food you can't find in a grocery store.
21748.           There were chitons -- can you hear me if I'm back here? There were chitons, sea cucumbers, smoked sea lion and seaweed. I really liked the seaweed. I asked around about it, wondering if I could buy some to take home. The next morning, a young woman comes up to me with a big bag of seaweed. She won't let me pay, she gifts it to me. In return, she says, I can help them stop the tankers. So here I am.
21749.           Because that seaweed is such a clear reminder of all that we stand to lose; the richness and abundance of this coast that has supported First Nation cultures for thousands of years. I grew up on this coast. I spent my childhood poking around in tide pools and exploring beaches.
21750.           And I'll be honest with you, this project scares me. We know that oil spills happen. We know that wildlife, salmon, jobs and communities may not survive. I can hear the fear in the voices of children up and down the coast, children far too young to be carrying such a burden. And I can hear the fear in

**Oral statements**  
**Exposés oraux**

- my own voice because this coast is my home and I am not willing to risk the possibility of an oil spill on the beaches and islands that I know and love.
21751. Growing up on the edge between land and sea has shaped who I am and how I see the world in so many ways. The strength and power of the ocean instilled in me at a young age, a sense of humility that there are things bigger than us, things we can't control. As any coastal person will tell you, the ocean demands respect.
21752. The sudden hushes of whale surfaces and everyone around me seems to hold their breath. These whales have taught me that a sense of wonder and stillness can be brought to any crowd. The interconnections between land and sea have taught me that the world can't be divided up into neat categories for us to presume that we can manage or mitigate.
21753. Barnacles, which did you know are stuck to the rocks by their heads and eat with their feet? Barnacles are eaten by bears. Coastal wolves will swim through open ocean to hunt seals and nutrients from salmon have been found at the very tops of trees. Amazingly, trees grow bigger in years with good salmon runs.
21754. When I stop to pay attention, there is so much that continues to amaze and surprise me. Like the time I was chased by an octopus along the shores of Haida Gwaii or the stinky smell of whale breath when you catch a whiff across the water.
21755. The stories could go on, but the point is this coast is my identity. An oil spill would not just destroy ecosystems and livelihoods and cultures, an oil spill would destroy a piece of me as well.
21756. But with you as my witness, I'm here today because I have hope. This is not just about saying no to Northern Gateway, it's about saying yes to a better future. When I was a kid about Hannah's age, I liked to read "Choose your own adventure books". At various points in those stories, the reader gets to decide what happens next. These proposed pipelines and tankers remind me of those stories because we are at a moment of choice for the coast and for the nation. Where do we want our collective story to go next?
21757. Behind door number one is a future with pipelines and tankers and expansion of the tar sands. A future where whatever oil doesn't spill along the

**Oral statements**  
**Exposés oraux**

- route will spill into the atmosphere when it is burned, increasing climate change and impacting us all wherever we live. A future with toxic jobs in oil spill clean up. Jobs I would not wish on anyone.
21758. Behind door number two is a future with jobs in fishing and tourism, where our children can grow up knowing the taste of shellfish and salmon; a future with spirit bears and places to go kayaking.
21759. So we face a choice. And the thing is, First Nations have already made this choice. Over 130 nations have signed the Save the Fraser Declaration, using their indigenous laws to prohibit the transport of tar sands crude through their lands and waters. Coastal First Nations have declared a ban on tankers in the Great Bear Rainforest.
21760. I am committed to doing everything I can so that my government, our government respects Aboriginal title and rights and decision-making authority and stands up for us just as these First Nations are standing up for their people.
21761. When I try to picture what sort of future I want for myself and for any children and grandchildren I might have one day, I don't see tar sands or tankers, I see a future where we have made a choice to stop burning so much oil. There were still -- there will still, I hope, be salmon in the rivers and shellfish in the ocean. We will have made a choice before it was too late to stop building pipelines, to stop releasing the greenhouse gases that are heating up our atmosphere and acidifying our oceans.
21762. We know the climate science. We know that an oil spill would only be a matter of time. We know the impact of a spill and the impossibility of clean up. And so I encourage you to make the decision that your grandchildren can look back on with pride. We could be the ancestors that fucked it up, pardon my language.
21763. **THE CHAIRPERSON:** No, there's no pardon your language. That's entirely inappropriate and please don't continue on with any language like that again.
21764. **MS. CAITLYN VERNON:** Or we could be the ancestors that took action when it was so urgently needed and left behind us a legacy of hope.
21765. I want to share a story with you. The story's in a book I wrote about

**Oral statements**  
**Exposés oraux**

- the coast called “Nowhere Else on Earth: Standing Tall for the Great Bear Rainforest”. If you have kids in your life who are wondering what all the fuss is about, why you're travelling around hearing from so many upset people, you might consider showing them this book. It explains things in language that a nine year old can understand.
21766.           When I was a young girl, I had posters of sea otters on my bedroom wall. Something about them captured my imagination. They were cute, their alert eyes peering out from furry faces where they rested in the kelp beds. I knew they'd been hunted almost to extinction, that there were only a few in B.C. waters, and that I might never see one in the wild.
21767.           When I started to spend time in the Great Bear Rainforest, I began hearing stories about sea otters. These days the otters aren't so few and far between. In fact, when I confessed my lifelong dream of someday seeing a sea otter, people almost laughed at me, they did laugh at me. There are lots, I was told, along the outer coast.
21768.           Finally, my moment came. I was on a small boat and there they were, their dark heads sticking out above the white water where the waves were crashing up against the rocky coastline. And in that moment I knew what it was to have a dream come true. Finally, I could let go of some of the concern for the otters that I'd been holding inside since I was a girl.
21769.           These sea otters, of course, would be killed in an oil spill, just as they were with the Exxon Valdez spill in Alaska. That thick beautiful fur doesn't keep them warm when it's covered in oil, and when they try to lick it and clean it, the otters ingest the toxins and are poisoned.
21770.           Have you heard the old proverb about how insanity is doing the same thing over and over again and yet expecting a different outcome? We know the path we are on. Building this pipeline would be more of the same.
21771.           **THE CHAIRPERSON:** Excuse me just a second. I -- I'm just asking the media person if they would please respect the lines that we've set for people to be behind the media.
21772.           Go back to where the media lines are, please. Thank you very much.
21773.           Sorry for the disruption. Please continue.

21774. **MS. CAITLYN VERNON:** --- just as we have done in so many other places. This project would enrich a few shareholders while impoverishing the land and waters and the people that depend on them. But just because as a society we are going down a certain path doesn't mean we need to continue down that path. Together we can choose a different future. A future with jobs that don't damage the ecosystems we depend on.

21775. When we look back in history there are so many moments when things we took for granted changed. Moments like women getting the vote or ending segregation. Transitioning to green jobs instead of pipelines, taking action on climate change, these things may seem hard but they are not impossible. Where there is a will there is a way, we just need to find the courage to start taking steps in that direction. And in the case of the Great Bear Rainforest, in conclusion, it is simple; we just need to protect what we already have.

21776. When I stand under an ancient tree that has been nourished by salmon since before Europeans stumbled on to the shores of North America, I'm reminded that we humans are just one piece of a bigger puzzle. I'm reminded that to be sustainable, to choose the legacy of hope, our interactions with the ecosystems we depend on must be guided by humility and respect, and, you know, there is space under those ancient trees for many more people to stand tall.

21777. I look forward to working together with you to build the future we want to live in. It starts by saying no to this project.

21778. Thank you very much.

21779. **THE CHAIRPERSON:** Thank you, Ms. Vernon.

21780. Our staff were under the understanding that this is your daughter, is that not the case?

21781. **MS. CAITLYN VERNON:** I didn't tell them she was my daughter. She wanted to be here as my witness, and they offered her a seat at the table.

21782. **THE CHAIRPERSON:** So, Ms. Vernon, we did say that everybody was allowed to bring one person into the room and it's not respectful for you to take advantage of the situation and bring more than one person into the room. So  
---



21783.           **MS. CAITLYN VERNON:** I apologize. I spoke with them yesterday. I said that there was a young woman who was requesting to come me. I did not indicate she was my daughter and that somebody else would come as her chaperone.

21784.           **THE CHAIRPERSON:** We don't need to get into this at this point. I just wanted to let you know our thoughts on it.

21785.           Thank you.

21786.           **MEMBER BATEMAN:** Good afternoon, Ms. Verstegen. Please go ahead and present.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. SARAH VERSTEGEN:**

21787.           **MS. SARAH VERSTEGEN:** Thank you for your attention at this point in the day. I'd like to thank also the other speakers. I've actually enjoyed listening to them and to the Songhees, and let you know that I am self-employed under what's commonly known as environmental conservation services.

21788.           And I'd like to start by asking each of you and all the people in the room to just pay attention for a moment to the next two breaths that you take.

21789.           My request for paying attention to those breaths is because I'd like you to know that one of those two breaths comes from oxygen generated by plankton in the ocean, and thanks to a book by Alanna Mitchell called "Seasick" I learned of a very helpful analogy.

21790.           Much like each of us as a human being has vital signs, such as our heart rate or our breathing rate, things like that; our blood pressure, the ocean and the earth have vital signs. And despite the immense size of the world's oceans, the ocean's vital signs are changing. And they are changing because they've taken up roughly a third of the carbon released into the atmosphere since the beginning of the industrial revolution and 80 percent of the extra heat that has been generated in that time as well.

21791.           This combination of increased heat and carbon brings about a change in the ocean's vital signs making it more acidic, changing its temperature, volume, ice cover, patterns of saltiness, and its function within the global carbon and

oxygen cycles.

21792. So I'd like you to remember that second breath each time you hear about climate change and remember that extreme weather is becoming more common. Previous speakers have spoken quite well to that and what that means in terms of landslides, weather, extreme weather. And remember that we are increasingly less able to base our expectations for the future climate upon the recent past. We really don't know what's going to happen.
21793. Since my understanding of the scope of this Panel is that you're not supposed to concern yourself with that bigger question of climate change, I'll move on, and I just want to say that that's despite the fact that the oil sands represent a carbon deposit as large or larger, actually, than the Saudi Arabian petroleum deposits.
21794. So onto the effects of sea transport, pipeline transport, and safety issues related to Northern Gateway.
21795. Two years ago, I travelled to Hartley Bay and worked with some Gitga'at technicians, Mick and Alex, to document eelgrass and kelp habitat as well as find if there were any abalone, and we did find all of those things and many others.
21796. Abalone, I'd like to mention, are an endangered species under the *Species at Risk Act* as of 2011. And funding came in later than usual, in fact, later than the last minute, so we were really quite rushed, getting out of town late.
21797. And by the way, if anybody around here knows where all that so-called foreign money is coming from I'd really like to know where to get in line, because we were quite pressed for money and the money we did get came from here in Canada, in fact, very close to here, and we stayed in places like hostels. Okay? We're not washing in money here.
21798. And so that was our research budget. So nonetheless, on short notice, a fellow diver, Jamie Smith, who's an extraordinary diver, and I loaded up underwater cameras, and scuba gear, and computers, and range finders, and all that stuff and we drove north.
21799. And we stopped on the way to supermarket to get some food. We hadn't had time to make a big list, we just, you know, spent 45 minutes and loaded

**Oral statements**  
**Exposés oraux**

- up as best we could for the room we had left in the truck. And once in Hartley Bay the work was moving along quite well and we found that we were running out of food, particularly fresh food.
21800. So fortunately, Jamie's quite good with fishing and was able to borrow a fishing rod. So we were able to eat fish and we learned that we could send an email to a local supermarket in Prince Rupert, that's half a day's water taxi ride away or a floatplane trip, and they'd pack up a grocery order and they would send it to us on the next floatplane.
21801. All right, so we got our order in and then the appointed time came to meet the float -- or excuse me, to meet the water taxi and the order wasn't there because the supermarket had forgotten to open their email. So they were going to put it on the floatplane.
21802. So we interrupt our time in the field to go meet the floatplane and the floatplane has been delayed due to weather. So we returned back to the field and our Gitga'at technicians, when we would have the camera underwater and the image of whatever was underwater would show up on the screen, there Alex and Mick are exclaiming each time they see a thing that's a traditional dish about the food that it's going to make, and it really served to remind me that when you're up in Hartley Bay you don't get to go to the nearest supermarket. Your food comes from the land and water surrounding the area.
21803. So traditionally, with First Nations, land and water was drug store, hardware store and grocery store, and it's still, in practical terms, very much a grocery store. So it's not just a thing that a lot of urban people would think about, you know, pop out and get some food, you're still depending on the natural environment in a big way.
21804. So, having been in -- in the field along proposed tanker routes, I do have some points that I'd like to make. The area is remote. Many other speakers have referred to what that means and how hard it is to get crews in or to get groceries in or whatever.
21805. The sinking of the Queen of the North, the Exxon Valdez and the more recent crash of a freighter doing business at the Number 2 Coal Terminal at Tsawwassen just across the Strait of Georgia from here all remind -- and that was in calm conditions -- all remind me that if it can happen it will, regardless of the number of tugs, regardless of the number of hulls. It's not a question of if a crash

- will happen it's when some kind of a spill or incident will happen that will spill bitumen.
21806.           Running -- so when there's a spill at the terminal or in the travel core, it will not -- corridor, it will not be crude oil. It will be some mix of bitumen and condensate. I understand in bitumen, it's that it sinks unlike many oils that would float. So I'm just going to -- I'm just worried about time here.
21807.           So, from what I've read, the cleanup of that kind of thing is basically unknown. We don't have a system for dealing with that kind of a spill and people have already referred to Enbridge's safety record which is not good and here's probably the gist of it.
21808.           The Gitga'at are not the only First Nation along the route. It's just the one that I happen to have a little bit of experience with and between the pipeline and the tanker routes there are dozens of First Nations still using their respective territories as grocery store, hardware store and drug store.
21809.           The Northern Gateway would risk First Nations cultural heritage and lands for the sake of Enbridge profits. I don't see that Enbridge has that right. I don't see that the Canadian government has that right. I don't see that the provincial government has that right.
21810.           I think that I would like the Panel to transcend the limits of the formal consideration to hold it to those little specifics and consider this project in the context of the larger picture. Climate change is real and happening now. Even if we were to stop emitting greenhouse gases now, the atmosphere is already affected by our previous releases and the temperature is going to keep rising a degree Celsius every decade over the next century, so we're already looking at a degree Celsius no matter what we do -- increase in temperature. That doesn't seem like much, but that's a degree Celsius over a century and a rise of 2 degrees Celsius is estimated to bring extinction of 20 to 40 percent of existing species, so we're already more than halfway there.
21811.           If we don't change our ways as soon as possible, an increase of 3 degrees Celsius would bring the extinction of up to 70 percent of existing species. Five times in the history of the planet we've had such sort of extinction events. The biggest mass extinction was 250 million years ago at the transition from the Permian period and that time the ocean ran out of oxygen and 90 percent of species perished. The planet continued but the biological systems shifted to fit the

chemistry and physics of the time.

21812.           So I'm here because I have a daughter who's grown. I have a step-granddaughter and it just really strikes me that the idea of development of the oil sands for the sake of the economy is very short-sighted when you look at the bigger picture and what kind of economy will be there in their generation given those kinds of conditions with a 20 to 40 percent extinction rate?

21813.           The particular project of the Northern Gateway would most immediately damage First Nations and local communities and their territories, but the rest of us are not far behind and you can at least say no on this one.

21814.           Thank you.

21815.           **THE CHAIRPERSON:** Thank you for your oral statements.

--- (A short pause/Courte pause)

21816.           **MEMBER MATTHEWS:** Okay, it looks like you guys are the last two for our afternoon session anyway.

21817.           So welcome, Mr. Vipond, so please go ahead and present to us.

--- **ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. DON VIPOND:**

21818.           **MR. DON VIPOND:** Good afternoon and I salute you for hanging in.

--- (Laughter/Rires)

21819.           **MR. DON VIPOND:** My name is Don --

21820.           **THE CHAIRPERSON:** I just have to tell you it's a privilege. So --

21821.           **MR. DON VIPOND:** I beg your pardon.

21822.           **THE CHAIRPERSON:** I said I just have to tell you it's a privilege for us to be here.

21823.           **MR. DON VIPOND:** It's a privilege for us too I think.

**Oral statements**  
**Exposés oraux**

21824. My name is Don Vipond; I live in Saanichton which is a small community just north of Victoria. I've lived in British Columbia for 46 years. I'm 80 years old and I'm retired from the print media, daily newspapers where I worked as a reporter and editor for 35 years.
21825. I've been dragged here today by two emotions; love and fear. I am here because I am convinced that something that I love passionately is in considerable danger and that makes me afraid. The something I love passionately I do not think of as simply the Province of British Columbia; it is people, family, friends and fellow citizens and that's also all manner of wildlife, fauna and flora, as well as the land itself, steep forest slopes, narrow green valleys, creeks, ridges, booming rivers, benchland, bold mountains and the chill and rich coastal waters, all of the elements that comprise this beautiful part of western Canada.
21826. This is my home, the home of 4.5 million Canadians and to other life forms and natural features beyond count. How can I explain the beauty and the fragility I feel so keenly when I speak of this province? Words seem so feeble when you stand beside the Skeena River of mists or climb into the wilderness of Manning Park or Wells Gray Park, when you touch the tissue leaves of a clematis or see a crimson spread of Indian paintbrush in an alpine meadow, when you watch a cautious wolf fish for salmon.
21827. I am pretty sure that each of you has a place that is precious to you, maybe a house, a lake, a park, a stream. I doubt that you would sit still if you thought the place you treasured was under serious threat. So you will understand why so many of us are lining up to tell you of our concerns. I think our wider home is at risk needlessly, needlessly unless you are in the tar sands business.
21828. The tar sands industry through this proposal talks about measures to make these pipelines and related tanker traffic safe. Everything the pipeline company says is problematic; maybe yes, maybe no. I'm here because I believe in certainties like earthquakes and avalanches and volcanoes and tsunamis and mudslides and floods.
21829. Is there anyone here who does not believe that tectonic plates are squeezing together as we speak and that this certainty will produce occasional sporadic, uncontrollable results?
21830. These natural events I've noted are all certainties. They are part of the history of this planet which still wrinkles its skin and huffs and puffs in awesome

- ways from time to time. The only questions associated with these certainties are where, when, how intense and how often.
21831. Now, we all have to take our chances with these violent natural occurrences. What we do not have to do is take risks with them, which are optional.
21832. The pipeline and tanker traffic route proposed by the tar sands industry across 1,100 kilometres of wilderness B.C. to Kitimat, then out to a sometimes violent ocean through narrow winding channels, threading past numerous islands and reefs, large and small.
21833. That proposal is optional.
21834. Truthfully, I find it also insulting; arrogant and insulting to everyone who lives here because it puts at high risk our inland waterways, which sustain forest and field, and our coastal waters and all the life forms dependent upon unpolluted habitat. For what? Solely for the increased profit of the tar sands industry.
21835. For decades, my wife and I have travelled to most every corner of this province repeatedly. We have travelled the so-called inside passage from Port Hardy to the north end of this island to Prince Rupert five times, often enough to gather a distinct impression of the coast that this proposal would put at high risk because of the certainties I have already noted.
21836. I say our lands, our coastal waters, even as I understand very well that none of us own any of these things but I believe wholeheartedly that every generation has an obligation to serve in the role of steward, to look after the land and waters around them. And this pipeline tanker threat is coming on our watch. We simply must speak up.
21837. So here we are. But how did we get here in the first place? This is how I see it.
21838. The tar sands industry in Alberta has a valuable product, one with an assured market in Canada and the U.S. for all of its production. What could be better than that? Answer, two assured markets. If any industry has two eager markets such as the U.S. and China, they can play one against the other, raise prices, increase profits.

21839. Enbridge's Northern Gateway pipeline proposal is the tar sands industry's bid to secure that second market. The industry's sole motive, increasing profit. Nothing more, nothing less.
21840. I have nothing against ethical capitalism. It has brought many of us a lifestyle we enjoy. I drive a car. It burns gasoline. But from time to time, big industries are astonishingly arrogant, brazen in their thrust for greater profits. This proposal is a vivid case in point.
21841. Allow me to note something important here. Oil products are poisonous. If ingested, they will kill any animal, any plant, any bird, any fish. That's another certainty. We are talking about the proposed continuous mass transportation of poison right across our province across more than 800 rivers, streams, creeks, across valleys, even through a mountain, and then boating this poison through the most treacherous of our coastal waters.
21842. And the volume of tanker traffic proposed, more than 200 sailings annually, virtually assures that a laden tanker will be in the wrong place at the wrong time when one of these violent certainties occurs.
21843. This is a good time to note that all talk of oil spill clean-up is fundamentally nonsense. When this poison gets into the water, be it lake or stream or ocean, the damage is done. The industry can lick up a fraction of it. On the ocean, the great currents and immutable tides will distribute it -- the rest of it from scores of miles, painting the intertidal zones again and again, carrying it up and down the coast. Many spills testify to this. It is another certainty.
21844. How could I vote for any politician, federal, provincial, municipal, who was willing to put this beloved land and its coastal waters at such high risk?
21845. I have one final fear I need to note. It's this scenario. After you file your report with your recommendations, the Federal Cabinet ignores the massive opposition in British Columbia, it follows its own agenda, dealing the democratic process a mighty blow in the process by granting federal political approval to this pipeline tanker proposal. That, I fear, would carry this province into a disruptive social confrontation.
21846. Politics trumping overwhelming popular opinion will lead to violence. People will be hurt ---



21847. **THE CHAIRPERSON:** Again ---

21848. **MR. DON VIPOND:** --- and that would be the greatest tragedy.

21849. **THE CHAIRPERSON:** --- Mr. Vipond, as we've said before, you know, making remarks about potential civil disobedience and unlawful obstruction isn't helpful to what we need to consider as a Panel, so we'd ask you not to make any further remarks in that way.

21850. **MR. DON VIPOND:** These hearings and your report are an important test for Canada's democratic process. The stakes are high. I believe British Columbians and our many allies will protect this province from this rash scheme.

21851. Thank you for your attention.

21852. **MEMBER BATEMAN:** Mr. Woodward, thank you. You'll be our last speaker for this particular session. You have 10 minutes to express your views to the Panel. Please begin.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. MICHAEL  
WOODWARD:**

21853. **MR. MICHAEL WOODWARD:** Thank you for your patience listening to us all today. I hope you have a little bit of attention left.

21854. **THE CHAIRPERSON:** We're trained for this. We do.

--- (Laughter/Rires)

21855. **THE CHAIRPERSON:** And we're going to do it again tonight, too.

21856. **MR. MICHAEL WOODWARD:** Yeah, I know.

21857. **THE CHAIRPERSON:** It's -- no, honestly, I mean, people keep saying these things about, you know, how can you do it. It's just an honour and a privilege to be in the positions that we're in and we're fully attentive.

21858. **MR. MICHAEL WOODWARD:** Thank you.

**Oral statements**  
**Exposés oraux**

21859. I'm speaking today as a concerned citizen, a sailor and a Master of Science. I have more than 50 years of experience out on the water, and it continues to be a big part of my life.
21860. I am an oceanographer and hydrographer who has studied the area of the proposed tanker traffic in detail and have made more than 10 trips to the area lasting typically three weeks on 200 to 300-foot research ships, some as chief scientist.
21861. For a time, I was an oil spill emergency adviser for the Department of Fisheries and Oceans. And I have a good understanding of the potential spread of oil and of clean-up technology. I have studied the consequences of the Exxon Valdez accident.
21862. A good project requires good design. A famous engineer, Petroski, defines good design as the complete and proper anticipation of what can go wrong. Think upon it carefully. It's very succinct. It's powerful. Complete and proper anticipation. It is a study of failure modes. It is a study of failure to avoid failure.
21863. An exhaustive examination of possible failure modes is essential to good design and requires the study of extreme conditions. If you don't know the bad things that are going to happen, you can't anticipate those kinds of failures.
21864. The understanding of extreme conditions is critical to a meaningful risk assessment, but Enbridge has chosen to deal in average -- averages. For example, their waves report omits the occurrence of 90-foot waves observed at the Setco oil rig in Queen Charlotte Sound.
21865. In the conclusion of the Enbridge report, it states:
- "Significant wave heights exceeding four metres occur nearly 18 percent of the time in Queen Charlotte Sound."* (As read)
21866. And that's all they have to say on the matter.
21867. This is of little use in terms of risk assessment. I believe that the marine component of this project fails the test of good design, fails it utterly.

**Oral statements**  
**Exposés oraux**

21868. This area is frequently stormy, at times dangerous and deadly for any shipping, with hurricane force winds strong enough to blow a supertanker onto the rocks. These waters have been assessed as the fourth most dangerous in the world.
21869. Nature and weather is unforgiving, heartless, powerful, to be respected. Gales are common and in those conditions it will not be possible to safely operate the proposed tugs in open water nor to land marine pilots on these ships. Two of the proposed safety measures are not available in these conditions.
21870. Take it from someone who has been there. I have seen these conditions first-hand from a 230-foot research ship. A powerful, seaworthy ship, relatively more powerful and manoeuvrable than a supertanker for sure. Twice we encountered hurricane force winds. Once caught by surprise in a storm that was not forecast and we had to ride it out.
21871. We were in Queen Charlotte Sound with no storm warning and winds rose from calm in the late afternoon to over 70 knots by nightfall. We tried to tell the Atmospheric Environment Service there was a big wind blowing. They wouldn't even believe us much less raise a storm warning. They wouldn't even believe us.
21872. We got a call from the Rescue Coordination Centre. Several fish boats had capsized and sunk off the north end of Vancouver Island. The Coast Guard aircraft had tried to help them. They launched life rafts; they were all blown away. They could see these men in the water in survival suits with their helicopters; they couldn't attempt to rescue them. It's far too dangerous. We were asked to try to come to their aid.
21873. We gave it all we could. This 230 foot -- it's -- the hammer's down, the engines are smoking, the bows leaping out of the water. Lumps of green water are smashing into the wheelhouse 50 feet above the water line. We're taking damage. We're pushing on.
21874. We had to give up. The thing would go 16 knots normally. It's only doing maybe three or four. The lifeboats on the lower deck got carried away. I mean smashed to bits. We tried to go to these people. I -- we wouldn't be doing this unless we were trying to save somebody's lives but we didn't make it. These people all died. This is a deadly place. It's not to be trifled with.

**Oral statements**  
**Exposés oraux**

21875. Winds at 90 knots are four times more powerful than winds at 45 knots. The force has got to be seen to be appreciated. This is not the place to be running tankers. A Coast Guard in these conditions can't help people.
21876. On one trip we had gale force winds over 45 knots that persisted for more than two weeks. It was too rough to operate our ship. Once we poked our nose out and we took a beating. And we went back into Port Hardy. You can't expect these tugboats or the marine pilot boats to be able to operate in these conditions. That option's just not safely available.
21877. In 10 trips I encountered hurricane force winds twice; 20 percent of the time. Extremely dangerous to any shipping. It is my opinion that operating supertankers here is a recipe for a bitumen disaster. No amount of money or human intervention will be able to fix the damage caused by a supertanker-sized bitumen spill.
21878. The Douglas Channel is narrow and winding with hard, unforgiving, rocky shores. Human error or equipment failure is much more serious in these confined waters than in the open ocean. There may only be a few minutes to notice and recover from a mistake. Witness the Queen of the North. There is little room for error.
21879. As far as so-called cleanup goes, this is a very difficult area to work in with few roads or settlements. In the case of the Exxon Valdez, less than 10 percent of the oil was recovered, and many feel that the so-called cleanup effort caused more harm than good. Even 23 years after the Exxon Valdez the herring population in Prince William Sound is currently classified as an "injured resource" that is not recovering. And I quote from the Western Fisheries Research Centre of a U.S. geological survey.
21880. In addition to the human economic impacts of the population decline the prolonged ecological impacts were devastating. The Exxon Valdez accident, although it was well-known, was not particularly large relatively speaking; only number 35 in the list of tanker spills at 37,000 tonnes. Compare with the Amoco Cadiz at 223,000 tonnes.
21881. Worse accidents than the Exxon Valdez would be a definite possibility were this project to be approved. It may be expected that a large release of bitumen in the area of the proposed tanker traffic would remain mostly in the environment, left to natural processes and causing untold long-term damage to the

- environment and all that depend upon it.
21882. In my professional opinion, as a master of science, an oceanographer, and a mariner the proposed project is ill-advised, ignorant and irresponsible from the point of the view of the public good. I urge you to recommend strongly against its approval.
21883. Thank you for your attention.
21884. **THE CHAIRPERSON:** Thank you to both of you for -- I imagine you might have had to wait a little bit of time before you were able to give your oral statements this afternoon and we thank you for your patience and for providing your statements to us.
21885. Thank you.
21886. This concludes this afternoon session. We'll sit again tonight at seven o'clock.
21887. Thank you.
- Upon recessing at 5:08 p.m./L'audience est suspendue à 17h08  
--- Upon resuming at 7:03 p.m./L'audience est reprise à 19h03
21888. **THE CHAIRPERSON:** Good evening.
21889. Just while our initial oral statement presenters get ready to present, I'll just mention that every once in a while we have technical glitches and this afternoon our webcast apparently was a bit intermittent. And it would go down and back up and then down and back up a few times. I understand that it was off fairly -- for fairly short periods of time but it was down a few times.
21890. So our apologies to anybody who was listening in on the webcast and wasn't able to follow everything. If you do want to see what went on during the brief periods when the webcast was down, I would encourage you to go to our website sometime after tomorrow noon probably, and you'll see the copy of the transcript that'll be available at that point for today's proceeding.
21891. And obviously there's transcripts produced every day. But like I say, we endeavour to do all we can to keep the technological gremlins away but every

once in a while they get the better of us.

21892. So thank you for your understanding on that.

21893. And with that, Mr. Carter, would you begin with your oral statement please.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. BRUCE CARTER:**

21894. **MR. BRUCE CARTER:** Certainly. Hello, and thank you for having me. Sorry I don't know your names. But it's good to be here.

21895. **THE CHAIRPERSON:** Sorry. I -- no, no. Not at all.

21896. My name is Sheila Leggett.

21897. **MR. BRUCE CARTER:** Hi, Sheila.

21898. **THE CHAIRPERSON:** This is Kenneth Bateman.

21899. **MEMBER BATEMAN:** Hi there.

21900. **MR. BRUCE CARTER:** Kenneth.

21901. **THE CHAIRPERSON:** And this Hans Matthews.

21902. **MEMBER MATTHEWS:** Ho.

21903. **MR. BRUCE CARTER:** Hi Dennis.

21904. **THE CHAIRPERSON:** Hans.

21905. **MR. BRUCE CARTER:** And I've read them before, I just didn't see them out there.

21906. So who am I? I'm Bruce Carter; I'm just a -- I live in Shawnigan Lake and a business consultant and concerned citizen I guess.

21907. And I kind of came to realize that you guys have heard a lot of this and lots of facts and figures and things probably weren't worth me repeating and

**Oral statements**  
**Exposés oraux**

- whatnot. And I think over the -- how long you've been doing this you have probably -- you probably know the truth, I guess, and I think when the truth is known, as far as I'm concerned, the negative impacts of this project are obvious.
21908. Just in terms of the whole economic model thing, these ideas that, you know, our national capital or the environment or whatnot is free is the only thing that makes a lot of these projects feasible in the first place, but they're not really free. We're just passing on the legacy.
21909. And I guess from my perspective, I mean, our generation, my generation, we've all done pretty good with the exploitation of peoples and planet and whatnot, and so I'm looking ahead where are we going and here basically thinking of my children, grandchildren, future generations of all peoples, not just mine or even Canada's.
21910. And it seems to me that -- I guess from all over the planet I'm hearing "Where's the Canada I used to know?" which is the same thing I'm sort of starting to feel. And I think we're very privileged and wealthy relative to most peoples on the planet and we need to be contributing to positive change for humanity, if you will. I mean, I know some people still deny global warming and climate change, whatever the terminology might be, but it's quite obvious that things are changing at rates that have never been known before anyways.
21911. So what are we doing about it? We're going the wrong way, I guess, on the whole business.
21912. And maybe I'll try to stick to the point forms that were provided to me. So whether the project is in the public interest, it's definitely not. And I don't know how you would define "public". The definition of words seems to be something that's changing all the time by those writing the rules. But the public interest, is that -- I mean, is that global citizens? Is that the public? Or is it -- I don't know -- only those directly adjacent to the pipeline that are the public? I don't really know what that means. But in my view, is it in the public interest? Well, no, because it's the wrong project, wrong development, wrong century basically. You know, it's time to get moving forward again.
21913. Whether the Panel should recommend approval of the project, again, my opinion would be no for many reasons, but I think, you know, you'll make your own decision about that, which I suspect is already made, but nonetheless.

**Oral statements**  
**Exposés oraux**

21914. The terms and conditions that should be applied to the project if it were to proceed, the most obvious to me there would be the liability protection that the Enbridge pipeline would have sufficient resources and insurance and whatnot to cover the oil spills that obviously happen, but if a catastrophic one happened, would they? And I would suggest probably not.
21915. Historically at least, the public's kind of left holding the bag, as usual. I don't know the structure of this particular project but it's likely a limited partnership or something, which would limit their liability, which is -- you know, the structure obviously, they're good at making money but, you know, they don't want to take liability. That's not good business practice, I guess.
21916. Any other information that supports my position; I don't want to really beat things to death because I probably met my statistical equivalency, which is I'm against the project if I didn't say that straightforward. Otherwise, I would say apart from being overwhelmed by all this -- I mean, ignorance is certainly bliss, but as I've been researching and learning more and more about this particular project and things happening in the country generally, it is overwhelming, but I've been inspired recently by the likes of the Idle No More Movement, which is a -- I see the First Nations people standing up for themselves, taking the power back and saying no to the destruction of Mother Earth, which is what really connects us all in the whole planet.
21917. We all have an interest. We all breathe the air. We all use the water. We all are sustained by the environment. You can't have healthy people without a healthy environment. It just doesn't work that way.
21918. So I guess I would say that -- I know it's not supposed to be political, but the -- it's just not supposed to be political. I'll leave that alone.
21919. If I'm allowed to read the -- or say the Fraser Declaration -- you're probably totally familiar with that, I would hope. It's a group of First Nations, some 70, I think, have signed this declaration. Maybe I just will read it because it's quite short.

*"We have inhabited and governed our territories within the Fraser watershed according to our laws and traditions since time immemorial. Our relationship with the watershed is ancient and profound and our inherent title rights and legal authority over these lands and waters have never been*



**Oral statements**  
**Exposés oraux**

*relinquished through treaty or war. Water is life for our peoples and for all living things that depend on it. The Fraser River and its tributaries are our lifeline. A threat to the Fraser and its headwaters is a threat to all who depend on its health. We will not allow our fish, animals, plants, people and ways of life to be placed at risk. We have come together to defend these lands and waters from the grave threat of the Enbridge Northern Gateway Pipeline Project. This project, which would link the tar sands to Asia through our territories and the headwaters of this great river and the federal process to approve it, violate our laws, traditions, values and our inherent rights as indigenous peoples under international laws.*

*We are united to exercise our inherent title rights and responsibility to ourselves, our ancestors, our descendants, and to people of the world to defend these lands and waters. Our laws require that we do this. Therefore, in upholding our ancestral laws, title rights and responsibilities, we declare we will not allow the proposed Enbridge Northern Gateway pipelines or similar tar sands project to cross our lands, territories, and watershed or the ocean migration routes of the Fraser River salmon.*

*We are adamant and resolved in this declaration made according to our legitimate laws and authority. We call on all who would place our lands and waters at risk. We have suffered enough. We will protect our watersheds and we will not tolerate this great threat to us all and to all future generations.” (As read)*

21920. I mean, they're speaking to obviously protecting what's important to them, but to everybody. This isn't an isolated thing.

21921. And I guess I just wanted to read that because it probably is the closest thing to my feelings about this that I've seen on paper. So it sounds like I'm running out of time, so I'm kind of just going to wind down, I guess.

21922. Another little snippet I found, though, I'll share. It just says:

*“Canadian's cannot afford to remain indifferent. A*

**Oral statements**  
**Exposés oraux**

*government that ignores the rule of law threatens the foundation of democracy. A government that denies the legal rights of any of its people threatens all citizens. A government that will not negotiate in good faith or respect its own contractual commitments puts the economic future of the country at risk.” (As read)*

21923. And I guess it gets back to I think Canada’s got to have a conversation about where we’re going, which will require us all to come together, respecting all our relations. And it just seems to be we’re seeing this divide between the have not’s, has, if you want, or whatnot. But I guess what I think keeps drawing us together again is Mother Earth. So that’s my greatest concern about this project.

21924. The waterways, I didn’t even get to those, but it’s probably a worse scenario, environmental risk, than it is on the land base. And again, the insurance isn’t adequate by the rules of the sea laid out by those writing the rules again, of course.

21925. And I think I’ve gone past my time, so thank you very much.

21926. **MEMBER MATTHEWS:** Okay. Thanks a lot.

21927. Good evening, Ms. Brett. Please go ahead. Thanks.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. JANE BRETT:**

21928. **MS. JANE BRETT:** Hello, my name is Jane Brett, and my husband and I have lived in Greater Victoria for over 44 years. My parents successfully operated an oil exploration and development company for many years.

21929. I’ve listened to all of the excellent presentations over the past days and I am so proud to live in the same province as these people who've spoken. And they stole all my points, so tonight I am going to give you some local history on issues number 3 and 13.

21930. It's my submission that the project not proceed. I particularly object to any view that consultation with First Nations does not include their ability to veto projects. Where we're meeting today is where Chief Lam Georges stood in what was known to the settlers as the Village of Songhees. I give thanks to the many

**Oral statements**  
**Exposés oraux**

- generous native Elders from many parts of the province who have allowed me to witness. Some are now only with us in spirit but still guiding, still watching, still waiting for justice.
21931. B.C. is not only the west, as is Alberta, but B.C. is truly the wild west. On many matters, beautiful British Columbia operates outside of the law without proper governmental oversight. We have a world-renowned wild west coast, but we also have at every level wild, untamed neglectful governments to go with it. There have been repeated demonstrations by them that they are unwilling to prevent accidents and that they are uninterested in preventing irreparable harm to the environment.
21932. We have a dreadful history of treason. Successive governments have betrayed citizens by pillaging the province's bounties at the expense of both the environment and the taxpayers. They're still playing cowboys and Indians out here and the gold rush is on again.
21933. One way taxpayers have subsidized major resource extraction projects is through the unrelenting attacks by government lawyers on First Nations. Fish Lake is a most recent glaring example. Ignoring costly Court findings from record-breaking lengthy Court proceedings, the provincial government rubberstamped its EA for Fish Lake and prematurely issued licences for drilling, road building and logging in Tsilhqot'in territory even before the federal government completed its unprecedented second federal EA.
21934. Regarding land claims, the honour of the Crown is non-existent. Instead, the government hopes that by sending in a cavalry of resource extractors it can effectively do an end run around the settling of sovereignty issues.
21935. In the Black Hills of South Dakota, the gold rush was started by General Custer, and during the Indian wars his explicit task was to kill every Indian who stood in the way of gold, timber, uranium and coal mining, even though this meant taking sacred land previously promised to the Sioux. Chief Sitting Bull, observing that his lands were being sliced up into smaller and smaller parcels, acidly asked, "When will they start selling dirt by the pound?"
21936. But of course, that's what we're doing in our rush. We're watching Indians die, slicing up their lands, selling gold by the ants -- by the ounce, and dirt, dirt, dirty oil by the barrel.

**Oral statements**  
**Exposés oraux**

21937.           The Applicant's pipeline will carry a lot of condensate and dilbit. When there's a slope failure and a pipeline rupture, this could mean almost 30,000 barrels per hour or 500 barrels a minute. That's a lot of spillage before somebody can turn off the tap.
21938.           Some say the Enbridge oil pipeline should be renamed the Enbridge toxic cocktail pipeline. Brooke Wilken described the chemicals being used in the pipeline as fat-soluble toxic carcinogens. Please re-read her presentation. It was excellent.
21939.           In Alberta, spillage into fresh waterways is a constant feature of oil sands production. Reclamation technicians admit that although they're hired to do so, they are unable to do anything like effective clean-up. They say it's just the price of production. However, Alberta's water quality should be everyone's concern, as any one of our descendants may one day live there, and Alberta First Nations do live there now and are already suffering.
21940.           In B.C., we already have toxic tailing ponds all over the place, too many, in fact, for future generations to maintain and safeguard. In 2009, a rancher noticed a leak in a tailing pond at Taseko's Gibraltar mine. It leaked 20,000 gallons one month and then another 15,000 the next month. Commenting on the discharge into the Fraser River, resident Susan McNeil said:
- "What seems small to them in the corporate world can, in fact, be detrimental to the safety of our health in our world." (As read)*
21941.           Where Canadian resource extraction companies operate international, citizens in those countries are seriously affected. They experience the human rights abuses, the community conflicts, the harassment by paramilitary guards, the assaults, the shootings and the murders. Canada's reputation in those places is that we avoid taking responsibility for life threatening so-called accidents. Private Members Bill C-323 will address these issues, but the government's Bill C-45 and the genocidal thinking behind it are in the way.
21942.           People in B.C. know that when the Fukushima accident occurred it took 10 days for nine monitors to be brought to B.C. to begin monitoring radiation. In Japan, citizens' groups had quickly built their own Geiger counters and were reporting independently of the government.

**Oral statements**  
**Exposés oraux**

21943. CFB Esquimalt has had monitors for the U.S. nuclear powered nuclear arm ship visits to Victoria, so I had imagined there were similar monitors up and down the coast. I was wrong. Even though B.C. faces two rogue nuclear states, it seems that publicly accessible radioactivity reports are not even on the radar.
21944. There was a widespread belief, prior to 911, that major environmental accidents due to terrorists' attacks simply couldn't happen in North America, but now we recognize which strategic and symbolic targets terrorists might choose. Prior to 2001, however, traitors at every level of our government refuse to address the dangers that nuclear ship visits presented to our coastal waters.
21945. In the face of the potential for accidents which would mean utter devastation for B.C. communities and wildlife, B.C. had no official expression of concern or questions to ask about nuclear safety in their waters. Even Victoria's double-hulled federal Minister of Environment wasn't afraid of nuclear ship visits during his terms of office, nor would he entertain any discussion about them.
21946. Many of us have come here reacting to our Prime Minister's labelling us as radicals for questioning the safety of this project. Perhaps people working for him don't usually ask questions.
21947. When my former Saanich Gulf Island's MP was Minister of Natural Resources, he succeeded in passing legislation that caps the liability of private nuclear plant operators. Now the public is responsible for the balance of liability. Nuclear power for the tar sands was another of his bright ideas.
21948. Regarding those nuclear ship visits to B.C., he gave me his personal assurance regarding those floating U.S. nuclear power plants. He said, "*The captains always ask permission before entering Dixon Entrance.*"
21949. We would be fossil fools to believe that they do not pose a risk for Douglas Channel.
21950. In conclusion, regarding the Fukushima so-called accident, the Japanese Prime Minister, when acknowledging that his government had been guilty of placing too much faith in the myth of safety, said:

*"We can no longer make the excuse [that what happened] was unpredictable...Crisis management requires us to imagine what may be outside our imagination."*

21951. And I wish you every good luck on your deliberations, and I thank you for your patience.

21952. **MEMBER BATEMAN:** Ms. Ferreira, thank you for coming this evening to share your views. Please begin.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. TRACY FERREIRA:**

21953. **MS. TRACY FERREIRA:** Thank you. Good evening.

21954. I grew up on the shores of the Saanich Inlet, part of what is now called the Sailor Sea. As a child, we used to harvest and enjoy many types of seafood right from our front yard. The menu of what is safe or available for harvest now has diminished significantly due in part to pollution; nothing major, just little bits of pollution over the years that are cumulative.

21955. I, as a lifelong citizen of this great province, believe in job creation and thoughtful development. However, my concern with this particular project is what little information has been made available from Enbridge Northern Gateway in regards to its risk mitigation for building the pipeline through avalanche and rockslide and landslide-prone mountain ranges and an active earthquake zone.

21956. And what measures will be in place for transporting the bitumen safely along an extremely dangerous coastline? Can it stop shipping when there is a storm warning or a tsunami warning? Where are all of the shutoffs along the pipeline if there is an avalanche or a landslide? Those two questions in my mind are in regards to prevention of a larger spill.

21957. The next question is what measures will be in place to help mitigate the introduction of invasive species to our coast from the increase in global traffic, tanker traffic that will be coming this way?

21958. And finally, what will be done to prevent the little bits of pollution that I spoke of firstly from the increase in marine traffic from accumulating along our coastline? These are my concerns and I would hope that they would be resolved before I could say yay or nay to this type of project. Thank you for your time.

21959. **THE CHAIRPERSON:** Thank you to each of you for your oral statements this evening.

--- (A short pause/Courte pause)

21960.           **THE CHAIRPERSON:** Good evening. Ms. Hansen, please proceed with your oral statement when you're ready.

--- **ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. ANNE HANSEN:**

21961.           **MS. ANNE HANSEN:** One moment please. My name is Anne Hansen and I am known for my 350 paintings of the black oyster catcher, a species that I became enamoured with five years ago when I moved here from Ontario. People ask me why I find the oyster catcher so captivating. It's not just the oyster catchers. It's their habitat, the mountains, ocean, rocky shores, kelp forests, mists, tide pools and the barnacles and limpets upon which they feed. It's also the sounds and smells of the coast that fuel my art.

21962.           Artists generally don't flock to B.C. to paint portraits of Joint Review Panel members or to marvel at oil pipelines, clear cuts or corporate mining company headquarters in Vancouver. Tourists don't come to admire Emily Carr or Roy Henry Vicar's paintings of soup cans or French nudes. If this book that I show you -- it's called *Canada's Raincoast at Risk* by Art for an Oil-Free Coast; it's a collective of artists -- is any indication, B.C. artists just cannot contain their reverence for our bears, eagles, whales, trees, salmon and mountains.

21963.           It wasn't clear to me what I would say to the Panel until it was announced that the public was banned from attending the hearings. This gives the perception that the Panel is indistinguishable from the proponent. Since the Panel only wants to hear from individuals who signed up a year and a half ago rather than the collective present voice of objection, I thought, do I have to draw a picture? So I did.

21964.           I painted a 4 x 5 foot painting especially to make my point. It's called *Red Sky in Mourning, Sailors Take Warning*. This is what it looks like. It shows a few of the more glamorous creatures that define the Pacific Northwest, sea lions, oyster catchers, salmon, hooded mergansers, a kingfisher and our provincial bird, the stellar's jay.

21965.           At a public event attended by concerned citizens and other media earlier today, I painted over my artwork in black as a protest to the pipeline itself and to the undemocratic nature of these proceedings. People ask if I'm distressed

**Oral statements**  
**Exposés oraux**

about destroying my painting. Another artwork can always be made, but when oil spills, we can't create a new coast or fishing town or bird sanctuary or west coast hiking trail or a new Haida Gwaii or a new kayak touring industry.

21966. People also ask me if the oyster catcher is endangered. It is, of course, and so are we. Every species is endangered by this suicidal path we are on, characterized by last century's schemes like the tar sands and Enbridge pipeline. If countries like Denmark and Germany, where the climate is similar to ours, can expand and exceed their significant targets in renewable energy, we have no excuse.

21967. As we speak, wildfires are raging across Australia. Temperatures have become so hot that Australia's weather bureau has been compelled to add a new colour, deep purple, to show on the map regions that have exceeded all-time heat records. Previously, that was 48 degrees Centigrade. Now recorded temperatures have reached an unheard of 50 degrees C. That's 122 degrees Fahrenheit.

21968. Liz Hanna of the Australian National University Climate Change Adaptation Network says:

*"We are well past the time of niceties, of avoiding the dire nature of what is unfolding." (As read)*

21969. What would Emily Carr do in a situation like this? She was a feisty woman and I don't think she would want any of us to be nice when unaccountable corporations highly subsidized by the Canadian taxpayer are ready to further degrade our province with their obscene greed.

21970. I'm going to submit two versions of my artwork to the Panel: the colourful painting itself in this miniature version that I have, and the blacked out version. If you don't already know by people's testimony and the widespread protests which vision will best serve present and future generations, then perhaps we have been too polite in our communication strategy. Thank you.

21971. **MEMBER MATTHEWS:** Okay, thanks a lot, Ms. Hansen.

21972. Mr. Fletcher, good evening. Go ahead.



--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. GARRY FLETCHER:

21973.           **MR. GARRY FLETCHER:** Good evening. Thank you for inviting me to speak to this Panel. My name is Garry Fletcher and I live in Metchosin on the coastline just south of Victoria.
21974.           For this submission I have several parts. First, my rationale for objecting to the Northern Gateway Project and then four concerns selected from many.
21975.           First, my rationale: I'm here because, as the late June Callwood said, there are no innocent bystanders. I grew up in the Prairies and I have a good appreciation for what little most landlocked Canadians know about our oceans. That water we see out there, it's not a lake. So I hope the Panel gives highest priority to the opinions of B.C. citizens.
21976.           I retired nine years ago, having taught biology and marine environmental systems at Lester Pearson College on the southern tip of Vancouver Island for 28 years. I also taught scuba diving to over 300 students at that time.
21977.           In 1980, my students in diving and marine science persuaded B.C. Parks to create the Race Rocks Ecological Reserve in the Strait of Juan de Fuca, where I still volunteer as a warden and for which I run the educational website *racerocks.com*.
21978.           In the early 1980s, an unidentified ship passed through the Strait of Juan de Fuca, dumping oil, perhaps from a bilge or a leak. The next day from our dive boat, on our way to Race Rocks, my students and I captured 26 oiled common murrelets which we took to the SPCA for cleaning and euthanasia.
21979.           Perhaps everyone needs to go through that experience in order to realize how vulnerable marine animals are to oil spills and how helpless we are to do anything about it.
21980.           You've already heard of the 1988 Nestucca disaster several times. Well my students and I captured oil birds in Sooke the following week and later gathered garbage bags full of mats of seagrasses and dead seabirds on our shores within 2 kilometres of Race Rocks.

**Oral statements**  
**Exposés oraux**

21981. Rarely is rehabilitation successful. The gory saga doesn't end there as oiled birds then become part of the food web.
21982. And I have brought for you a small baggie of part of that oil spill from Nestucca. Perfectly preserved seaweeds with no preservative fluid in them and it's left out at the desk in a little bag. I'd like you to have a look at that. See the nice seagrass in there after this many years.
21983. After that I was asked to sit on the oil spill committee started by David Anderson to advise the government on policies regarding the transport of crude oil along our coast. I went to seminars learning how to clean oiled birds and watched boom deployment from a ship in the Prince Rupert harbour and then we were disbanded. Change of provincial government priorities perhaps?
21984. In 1994 I received training for the B.C. marine oil spill workforce from environmental emergency coordinating office of B.C.'s department environment. I still have my card just as another member showed you the other day.
21985. Although no one in the government even remembers that phase, I wonder whatever happened to those government initiatives designed to involve the public in monitoring the oil industry and coming to help the environment when disaster strikes.
21986. So now I used the Race Rocks ecological reserve as a model for many of islands and coastal areas up and down Vancouver Island.
21987. I know firsthand what lives there, from the tide pools to the bottom sediment. In that acre reserve alone we have recorded 370 species of animals, including 77 bird species, and 13 species of marine mammal, probably only a tenth of the biodiversity that's really there and that's in less than 2 hectares of a Pacific island.
21988. I've experienced firsthand the interrelationships of many of the species, not only those with so-called direct commercial value, since those species only survive by intricate linkages with other seemingly insignificant ones.
21989. This allows me to know also of the incredible risks posed in our coastal waters when even one disaster occurs. I cannot ignore that if oil from a disaster spreads anything like that of the Exxon Valdez it would blanket the coast of B.C.

21990. Perhaps this project has triggered a threshold for what we are prepared to accept as project progress. We can no longer accept that large corporations and governments concerned mainly with immediate profits make decisions which forever jeopardize our cherished values.
21991. I have many concerns about this project but only time to submit a few. One is my concern about the environmental impact assessment process. And I understand you have a mandate to look at this.
21992. As soon as you start to look at isolated examples in a little box you destroy the integrity of how things really work. I hope your review is inclusive of all aspects of our natural capital, from the geological realities of this coast to the untamability of the ocean and the ecological integrity of our ecosystems.
21993. However, probably the most important aspect of environment impact in any project is the effect on humans, and in particular as you've heard tonight, the effect on First Nations people. They have evolved along with the ecosystems. The slightest disruption of that way of life, when they do not choose the path as we have seen in so many examples in Canada can lead to untold social problems in the future.
21994. Natural ecosystems, to some extent, can partially recover over time. There are few examples where cultures impacted negatively by so-called development can recover over time.
21995. Second concern, can we trust our governments to protect even the basic needs of our environment? You've already heard in Monday night's presentations the long history of inaction and delay on the part of government regulators.
21996. Now, I am deeply concerned with the omnibus bills of the Harper government stripping critical regulations, seriously compromising the *Environmental Impact Assessment Act* and the *Inland Waters Act* and the *Fisheries Act*, giving industry free reign to ram through projects having serious implications on water quality, ecosystems, climate change and public health.
21997. Why were significant rivers in B.C., such as the Kitimat and the Upper Fraser, which lie along Northern Gateway pipeline, excluded from a schedule of protected waters?

21998.            These changes highlight a larger problem; that the Harper government is shirking responsibility in several critical areas including a long-term energy strategy, water protection strategy, as well as respect for First Nations Treaty rights.
21999.            How can we take seriously our government's platitudes about concern for environment when such backwards thinking and policies prevail?
22000.            My third concern is the vulnerability of other coastal ecological reserves. We have 12 reserves from Haida Gwaii to the North end of Vancouver Island at risk from tanker traffic at Hecate Strait.
22001.            Please have a look at [ecoreserves.bc.ca](http://ecoreserves.bc.ca) as suggested by Mike Fenger the other night and understand what scientists have determined is special about Dewdney and Glide islands with nesting sandhill cranes or the Byers Conroy Group with 100,000 nesting seabirds. Or Moore Island with 40,000 pairs of nesting rhinoceros auklets. These islands, just outside of the Douglas Channel support many of the breeding colonies of seabirds in the west coast.
22002.            And what about the habitat protection for four species at risk that our government currently is required to achieve and has not yet done so? And all of these live along the tanker route proposed.
22003.            If the trajectory of ocean current spreads out anywhere near as far as the Exxon Valdez spill did then all of the coast of B.C. could be vulnerable.
22004.            Number four, can we really trust Enbridge? Well they've spent thousands of dollars on advertisements greenwashing the project and their website assures us that everything is under control but their record from the past has not brought out my -- has brought out my skepticism.
22005.            I won't go into the details for time because of the -- what the National Transportation Safety Board in the U.S. reported recently. Indicating Enbridge has to share the blame with the Canadian and U.S. regulators for the spill in Michigan in 2010.
22006.            But the one point about that was the dilbit. I like that word. It sort of takes a whole idea of diluted bitumen and puts it in a, I think, a little bit of a negative light as it should be.

22007.           Then there's another report from the Globe and Mail of 2012, November 23; 900 barrels of crude oil leaked from an Enbridge Inc. facility near Chicago this week, haven't heard much about it since.
22008.           And one example of how they expect to mitigate the problems of shipping in that area appears in their website. They refer to Appendix A of the 2012 Technical Data Report by Hayco. The station description of six weather stations along the route of the Douglas Channel is very disconcerting.
22009.           Only one of the six stations has a good location for the meteorological tower, the remaining five stations however are not so encouraging, one example, Kersey Point. The tower is located just behind the navigation aid and the narrow rocky shore up against the trees. The station is exposed to winds from the north, east and south. However, winds from the west will be blocked by trees and Maitland Island, the same thing with the other four stations. Just what kind of idea of the meteorological conditions are they going to find out from those stations?
22010.           And my last concern, since I'm probably out of time am I, is the economic costs. And I was very concerned with Robyn Allan's statement, the former CEO of ICBC where Enbridge doesn't have adequate insurance coverage or the corporate structure to cover a multi-billion dollar oil spill.
22011.           Then the fisheries -- UBC Fisheries Centre study, the cost of cleaning up a major oil spill would hit ---
22012.           **MEMBER MATTHEWS:** Could you -- Mr. Fletcher can you wrap up in one sentence please?
22013.           **MR. GARRY FLETCHER:** How can anyone justify a project of this scope if what these experts say is true? Has the project not always been about Enbridge making more profits and never about benefits to impact Canadians -- communities or Canadians?
22014.           Thank you.
22015.           **MEMBER BATEMAN:** Thank you, Mr. Fletcher.
22016.           Ms. Daniel, thank you for joining us this evening and taking time to

participate. Please present your views.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. ANNE-MARIE DANIEL:**

22017. **MS. ANNE-MARIE DANIEL:** So my name is Anne-Marie Daniel; I live in North Saanich here in Vancouver Island. I'm a mother of three children, and I work as a consultant in conflict resolution and leadership development.

22018. As a mother of three children, my questions are always what will this provide for my children 10 to 20 years from now, what opportunities will this create?

22019. I shall speak about three aspects of this proposal that concern me; efficiency, job creation and the public interest.

22020. Efficiency is an easy word to use. I do not believe that the proposed pipeline is cost-effective or cost-efficient approach to the use of resources. Why ship bitumen, the heaviest and thickest form of petroleum? Doesn't it take more energy to ship something heavy than something light? Doesn't it create more greenhouse gases when you ship something heavy than something light?

22021. We've learned from the spill on the Kalamazoo River in Michigan that bitumen and the very toxic thinning agents that it is mixed with do not stay together in a spill. The thinning agents become airborne, where they create a toxic cloud, and the bitumen starts to sink.

22022. In Michigan, conventional clean-up methods didn't work and they are now trying to clean the riverbed of bitumen. Some of the bitumen takes on a neutral buoyancy and neither sinks to the bottom nor stays on the surface. They say this scenario is impossible to clean up.

22023. If we are going to ship oil, shouldn't we be shipping a substance that we can more readily deal with? This pipeline proposal would create a situation in which we could not clean up the spills that occur and the release of toxins could not be avoided. Yet, being able to clean after ourselves when mistakes occur is an important principle and our duty to the fellow human beings with whom we share this home we call earth.

22024. If we are incapable of cleaning up spills from this pipeline, which I believe is the case if we ship bitumen, then we cannot in good conscience allow

- this project to proceed.
22025. You have asked for comments about what terms and conditions should be placed on the proposed project should it be approved. My first recommendation, therefore, is that Enbridge should not be piping bitumen with the toxic thinning agents, but piping a substance that can be cleaned up instead. Refined oil has a better chance of being tracked by current spill technologies, even though we cannot call the usual 10 percent success rate a real success. I recommend that Enbridge rethink the fuels that it moves.
22026. Predictability is an important principle in project design. Given the tectonic fault lines along the B.C. coast, we must expect and be prepared for earthquakes.
22027. There was one earthquake a month in October, November and December of 2012, and I believe one a few days ago. We cannot predict the seismic activity in a way that gives enough lead time to inform pipeline operation, so the design of this project is literally on shaky ground.
22028. My second recommendation is that Enbridge should rethink the pipeline routes and take a path of least resistance over flat and stable ground to customers closer to home, such as those in eastern Canada, where they are currently buying oil from overseas.
22029. I now turn to job creation. I agree that job creation is of the utmost importance in a challenged economy. However, once the short term jobs and the construction of the pipeline are finished, the work involved in operating it will be minimal. The public has often objected to the sale of raw resources without first giving the opportunity to Canadian workers and technology to increase the value.
22030. Have we examined the possibility of refining our oil before selling it? We would create many more jobs in Canada if the oil were refined in Alberta, where they specialize in this kind of work.
22031. By sending the raw resource overseas, we risk accidents that we cannot mitigate and lose jobs for which we have expertise. It is irresponsible of the industry to move the refining of bitumen to Asia to exploit cheaper labour and lacks our health and safety regulations and working conditions. We should keep these jobs in Canada and protect the health of the workforce while investing in the futures of our citizens, who live with this type of resource extraction in their back

- yards.
22032. By skipping the step of refining the bitumen, we are literally passing the buck in terms of economic benefit and turning a blind eye to the risks of dubious working conditions and environmental safety. So my third recommendation is that the bitumen be refined in Alberta.
22033. My fourth recommendation is that a local customer be identified for this resource.
22034. Finally, how does this project relate to the public interest? The work of this Panel and its decisions take on an unusual importance today because the Government of Canada has left us with very few mechanisms to address these issues in the future. By passing Bill C-38 with its many changes to the *Environmental Assessment Act*, the *Fisheries Act*, the *At Risk Species Act* -- the *Species at Risk Act* and the *Navigable Waters Act*, much of the legislation that protects the environment and us, the people who live in it, has been removed.
22035. The Government of Canada has created a particularly risky context for projects like this one to be evaluated by the public. Without legislated protection for the habitat that the pipeline proposes to traverse, what recourse will the public have when things go wrong? What recourse will we have when there's an accident during construction or operation of the pipeline?
22036. If it is not against the law to degrade the environment, then who will judge how the costs and remedies are distributed?
22037. Enbridge is asking the public to share the risks of this project with them in the hopes of a brighter future. To share a project with significant inherent risks, there must be a level of trust. Given the gutting of our environmental protection laws and the characterization of those who object to their removal as radicals, a climate of trust is hard to instill.
22038. It seems that the costs of anything going wrong in this business would fall to the taxpayer, as is already the case with many toxic sites across Canada. Ironically, given the certainty of accidents and spills, many more jobs will indeed be created. These will be specialized jobs in spill cleanup and health care jobs for nursing citizens suffering from toxic effects of the substances released into our earth, air, and water.



**Oral statements**  
**Exposés oraux**

22039. Is this really the type of work we want for our children? Is this the brighter future that Enbridge and Canada envision for the people of Canada?
22040. My fifth recommendation is that the Government of Canada should restore the integrity of the environmental protection legislation and thereby assure the Canadian people that they are acting in the legitimate public interest when they consider a proposal like this one.
22041. The word "economy", as you may know, is made up of the word "oikos", meaning home, and the word "nomia", meaning management. This project neither contributes to a thriving economy and sustainable Canadian economy, nor the effective management of a shared home.
22042. Surely we deserve a long-term economic plan for energy use that supports nature in providing what we need to live.
22043. Thank you for this opportunity to speak. If we get this one wrong it is hard to see how the situation will be corrected.
22044. **THE CHAIRPERSON:** Thank you to each of you for your oral statements this evening.
- (A short pause/Courte pause)
22045. **THE CHAIRPERSON:** Good evening.
22046. Ms. Harris, please go ahead with your oral statement when you're ready.

--- **ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. NITYA HARRIS:**

22047. **MS. NITYA HARRIS:** Good evening. My name is Nitya Harris; I'm an engineer in the energy sector and I've also worked in B.C. as an environmental manager of the B.C. Buildings Corporation and as an associate professor for the Environment and Management Program at Royal Roads University. Previous to this, I lived in Alberta, where I worked for eight years as a reservoir engineer and a pipeline engineer with the Energy Resources Conservation Board.
22048. I would like to speak to all three aspects that constitute this Panel's mandate. One, whether the potential effects of the project are significant; two,

**Oral statements**  
**Exposés oraux**

- whether the projected -- whether the project is in the public interest and whether it should be approved and; three, the terms and conditions that would be placed on the proposed project if it is approved.
22049. First, I would like to address the risks from this pipeline. As you've heard many times over, the risks are great and unknown, including over 700 kilometres of remote areas being impacted in some parts by the pipeline; approximately 800 rivers and streams, most of them salmon bearing, being crossed; the potential for catastrophic spills such as the Enbridge pipeline spill in 2010 in the Kalamazoo River in Michigan; the risk to fisheries and tourism jobs across the province; the risk to oceans from super tankers; the impacts on wildlife both on land and water and; of course, the impact on First Nations.
22050. I have a great deal of sympathy with these concerns that have expressed -- been expressed by numerous people, and I fully support these concerns. The concern I would like to address today to this Panel is how this project relates to climate change.
22051. As you all know, Prime Minister Harper has made a promise to Canadians to reduce our greenhouse gases by 17 percent by 2020 and 65 percent by 2050. And leading scientists have indicated that the expansion of the tar sands and the pipeline cannot happen to fulfill this promise and to stop runaway global climate change.
22052. In fact, the MIT's joint program on the science and policy of global change has produced a report entitled "Canada's Bitumen Industry under CO<sub>2</sub> Constraints". And this report shows how and why Canadian tar sands must contract as part of a global effect to prevent a four degree increase in temperature and catastrophic climate change.
22053. This information should play a paramount role in the consideration of this pipeline application. Indeed, I don't understand why we are even considering this pipeline when we have expert knowledge. This will take us away from our climate change goals and indeed will lead us to ecosystem collapse.
22054. The concern for jobs, our energy future and our economy can be addressed in other ways. And this brings me to the second topic, whether or not this pipeline project is in the public interest. Obviously, all the -- all the risks that I have mentioned and others have mentioned indicate that this is not in our public interest.

22055. But here I will focus specifically on the loss of opportunity by moving forward with this pipeline project.
22056. For the past nine years, I have been working in managing a solar energy program in B.C. as the executive director of the Solar B.C. Program. Between 2008 and 2011, Solar B.C. has facilitated the installation of solar hot water systems on government buildings as in fire halls, community halls, recreation halls, pools, universities, colleges, hospitals, First Nations' homes and community buildings, social housing projects and homes across B.C.
22057. Approximately 50 schools in these three years have installed solar hot water or portable tank systems and students have become -- have made this part of their program in their schools. Thirty-three (33) communities have committed to become solar communities and B.C. has the first solar-ready regulation in Canada.
22058. I've given you a short synopsis of Solar B.C.'s accomplishments because I want to show you that renewable energy like solar can succeed when there's federal support for it. The Solar B.C. Program succeeded because incentives were provided to all the projects by both federal and provincial grants. I have found that communities across B.C. are very interested in renewable energy such as solar and other renewable -- and energy efficiency projects because they create local jobs.
22059. According to Blue Green Canada, an alliance of Canadian labour unions, environmental and civil society organizations, there are two jobs created for every million dollars invested in the oil and gas industry, where there are 15 jobs created for every million dollars invested in the clean energy sector, such as solar, wind, hydro and biomass, and these jobs are local jobs.
22060. Renewable energy has a large role to play in our energy future, but when Canada places its full attention only on the oil and gas sector, and specifically the tar sands, we lose the opportunity to explore these other avenues.
22061. Let me show you -- give you another example of this. Countries around the world are espousing renewable energy by financial, government and other support. In the early 1980s, Canada enjoyed a robust commitment for solar hot water from our federal government through incentives and other government support.

**Oral statements**  
**Exposés oraux**

22062. At this time, Austria, which has similar climate to many Canadian provinces, also had similar government support programs.
22063. So in the late -- well, also I should let you know, it's interesting to know that the sales in Canada for solar in the early 1980s were higher than for Austria. In the late '80s, oil prices dropped. And as they dropped, the Canadian solar program was cancelled. However, Austria kept going. They continued the government support and now they're one of the leaders in solar in the world. In fact, one in seven homes in Austria has solar on it. In Canada, the solar industry collapsed.
22064. This history provides two important lessons. One, strong federal support is important for such an industry to succeed and; two, consistent long-term government support is crucial.
22065. The information of Austria indicates it takes 15 years for such an industry to mature and become self-sufficient.
22066. In the last few years, solar hot water has had another upsurge in Canada due to incentives and federal support offered through the Ecoenergy for Renewable Heat Program. The cancellation of this program in 2011 again resulted in a collapse of the solar industry in B.C. and across Canada, and a lack of confidence in the public. Such stop-and-go programs are the death of renewable energy in Canada.
22067. As I mentioned, consistent, long-term government support is the key to establishment of renewable energy programs, but when government is focussed on one particular future energy source -- in this case tar sands and the pipeline -- the renewable energy sector and the opportunity for it in Canada disappears.
22068. If the best interests of Canada are to be considered here by this Panel, I would propose that focussing on the tar sands is not best for Canada's long term interests for all the reasons I've just mentioned.
22069. Before a large project such as this can be considered for our support, all the options need to be looked at and the Canadian energy strategy needs to be formulated that takes into account all the energy options including renewable energy and energy efficiency, the environmental impacts, the creation of local jobs and their potential to reduce greenhouse gases. To address our future energy needs in such a peaceful -- piecemeal manner is not in our best interest.

**Oral statements**  
**Exposés oraux**

22070. The third aspect I would like to now address is what has been asked, the terms and conditions necessary for the approval of this project. In the 1980s I was employed as a pipeline engineer with the Energy Resources Conservation Board, and so I am very familiar with this process that we have right here.

22071. As a part of my job, I provided staff support to the Panel. And we went across Alberta listening to pipeline hearings in many, many communities and we heard concerns and issues from lots of local people. After the hearing, the normal process was every pipeline application was approved with issues and concerns addressed through mitigation. Rejection of the pipeline was not a consideration.

22072. However, in my term at the ERCB, one pipeline was denied -- one pipeline application was denied. So I do have hope that this is a possibility here.

22073. I know very well a denial of an application is not an easily considered option for such hearings, but for all the reasons I've said already, the environmental risks, the fact that this project is in direct contravention of our climate change goals, and the fact that a larger, much more comprehensive energy strategy needs to be in place is something that needs to be considered here.

22074. I believe that denial of this application is the only answer here. This is too large a project with too many risks to approve with mitigating solutions. I sincerely ask the Panel to not follow the normal process of approval with a list of terms and conditions, but to have courage to firmly deny this application to ensure Canada's best interest.

22075. Thank you very much.

22076. **MEMBER MATTHEWS:** Great. Thanks a lot, Ms. Harris.

22077. Good evening, Mr. Lapp. Please share your oral statement with us.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. RALPH LAPP:**

22078. **MR. RALPH LAPP:** Thank you, members of the Joint Review Panel.

22079. My name is Ralph Lapp. I appreciate the opportunity to address you

**Oral statements**  
**Exposés oraux**

- regarding this vital deliberation. I'm a 66-year-old health care professional and sailor. I would like to introduce and conclude my personal perspective of the pipeline proposal with economic considerations.
22080. I know the financial rewards of the Alberta oil and gas industry. On my 1,000 acre ranch in Alberta, we have several gas wells and a proposed oil well. Despite realizing the financial benefits of petroleum production, I endeavour to reduce my carbon footprint and discourage worldwide consumption of these products.
22081. I seldom drive my car to work. Instead, in all kinds of weather I ride my bicycle to one of the three hospitals around the region. It seems ironic that we British Columbians on the west coast are riding our bicycles to work in increasing numbers while China's appetite for vehicular production and use rises considerably. Traditionally, the Chinese, by the millions, depended on bicycle transport.
22082. I've just read a report of a Chinese developer's \$11.2 billion plan to flatten 700 barren hills on 806 square kilometres to expand the desert city of Lanzhou, population 3.2 million. The city already had the dubious reputation as one of China's most polluted. Imagine the amount of fossil fuel expected to operate the heavy equipment to accomplish the proposed transformation of the earth's surface. Are we wanting to feed this voracious and unsustainable appetite for a huge amount of petroleum products?
22083. To feed this insatiable appetite, we risk compromising our sovereignty and our environment. Tankers would have to negotiate Hecate Strait, considered by Environment Canada to be the fourth most treacherous stretch of water on earth.
22084. In thousands of miles of sailing our boat, the only time we've filled the cockpit with waves of seawater, not once but twice, was crossing Hecate Strait and the wind really hadn't even reached gale force proportions. In Hecate Strait, wind will often oppose tidal current over a diffusely shallow seabed, creating unusually huge wave forms. Waves as high as 100 feet have been reported. They can make sailing treacherous for even the biggest ships.
22085. Getting the tankers from Kitimat to Hecate Strait is also fraught with risk. A couple of years ago, rather than use our diesel engine to push our sailboat south down Douglas Channel into a southerly headwind, we sailed necessitating

**Oral statements**  
**Exposés oraux**

many tacks every few minutes because of the narrowness of the passage. In comparison, in similar conditions it can take us a couple of hours to cross the Strait of Juan de Fuca out here. Douglas Channel is not the broad passage seen in the deceitful depiction by Enbridge.

22086. Enbridge continues to reinforce this misinformation in a recent advertorial in the Times column as stating, and I quote:

*“The Douglas Channel is already one of the deepest and widest inland waterways on North America’s west coast.”*

22087. It may be deep, but it’s far from wide. To get to Hecate Strait, tankers would have to cross a busy transportation route heading toward Grenville Channel and you can see it just past Hartley Bay on your map headed northwest. The tankers would be disruptive to an important commercial and recreational fishery.

22088. As a passenger on the Queen of the North, now sunk due to human error, I have witnessed an almost impenetrable barrier of fish nets such that the only passage through shredded a large, costly net and risked fouling the props. Fortunately, on that voyage we arrived safely in Prince Rupert, albeit late due to the virtually unavoidable congestion on our passage.

22089. Do we believe that a tanker with its props fouled, now adrift, doesn’t severely risk compromise to our exceptional environment? All the safety protocols in the world can be put in place, but when inevitable human error is introduced the results can be disastrous. And I haven’t even addressed yet the hazards of an unreliable Enbridge entrusted to monitor more than 1,000 kilometres of remote wilderness pipelines, nor have I addressed the inevitable continued expansion of tar sands consuming vast amounts of water and energy to produce the bitumen.

22090. Canada has an opportunity to promote and develop sustainable clean energy instead. With current technology, I personally support increased use of nuclear power with a view to electrical generation during periods of high demand and electricity and hydrogen for fuel cells during periods of lower electrical demand.

22091. Meanwhile, although Canada may not be a net importer of oil, I support greater energy independence for our country. To reduce the need for oil importation into eastern Canada, I am encouraged more by proposals to pipe

Alberta energy to eastern Canadian refineries than I am by a proposal such as David Black's to refine bitumen in Kitimat.

22092. It is tempting to support refinement of petroleum within our provincial borders as a value added resource. With our export of raw logs, British Columbians are acutely aware of missed financial opportunities when refinement could afford employment and greater financial reward locally. But I feel the shorter term financial rewards to us, Alberta, secondarily to Canada from expanded tar sands production is easily offset by the risks of piping bitumen and diluents through our B.C. wilderness and waterways.

22093. Even the promised economic benefit of such a project has been brought into question in a presentation to the National Energy Board about a year ago by Robyn Allan, an economist. Robyn concluded that an inflationary increase in oil prices would be necessary before the project would even be profitable. The result in increased cost of energy for Canadians would be detrimental nationally.

22094. Finally, I'd like to quote Ann Dale, Canada Research Chair in sustainable community development at our local Royal Roads University. Essentially, she has concluded that human well-being, not GDP, should be our measure of progress.

22095. I urge you to recommend that Enbridge not be allowed to construct the pipeline from Alberta to Kitimat.

22096. Thank you for your attention.

22097. **MEMBER BATEMAN:** Mr. Harnanansingh, thank you for coming this evening, for taking the time to present your views. Please begin.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. DEREK HARNANANSINGH:**

22098. **MR. DEREK HARNANANSINGH:** Good evening. I thank you for this opportunity to have my voice heard along with the hundreds of people here in Victoria and the thousands of people throughout the province who stand united in opposition to Enbridge's Northern Gateway Pipeline proposal.

22099. My name is Derek Harnanansingh. I hold a Bachelor's Degree in



**Oral statements**  
**Exposés oraux**

Information Technology from York University, and I'm currently employed as a web developer here.

22100. I would like to speak to you today from the perspective of a newcomer to British Columbia, specifically a newcomer to Victoria where I've lived for the past three years. Before that I was born and raised in Ontario, spending many years living in both Ottawa and in Toronto.

22101. While I was doing my education at York in Toronto, I had the good fortune to hear David Suzuki speak as part of a nationwide environmental movement aimed to educate young people in environmental issues that we're facing in Canada today, specifically, the environmental costs of resource commercialization and extraction.

22102. I have to admit, at that point I had very little insight into environmental issues and even less of an opinion on them, yet I felt compelled to hear him speak because I knew there would be some valuable lessons to be learned. Looking back, that day was a turning point in my life. It wasn't, of course, an immediate change, but the months and years to come led me to the point where I sit now, which is to say very aware of the environmental crisis that we face here in Canada, and very aware that we need to be leading a fundamental shift in the way we think and measure economic success, especially in terms of how it effects the environment.

22103. Shortly after graduating, I made my first visit to Vancouver Island where I visited remote areas on the island as well as on the mainland. I vividly remember being struck by the beauty and ruggedness of the wilderness of these areas while at the same time being absolutely shocked at the ample evidence of negative impact that we humans have had on the environment around us. One minute I would feel like I was in the middle of nowhere and the next turn I would see signs of environmental blight, logging, fish farms, beach debris, tankers, cruise ships, you name it.

22104. I had the privilege of seeing and learning about all kinds of wildlife, marine animals, land animals, birds, all explained to me by people who lived and grew up in these areas and in context of how important each is in part of a larger ecosystem and none of whom play a part too small or too insignificant. I also heard about the negative environmental changes that these people had witnessed in their own lifetimes, and one of the most important lessons I learned was how fragile and interconnected everything in the environment is, including us.

22105.           So I sit here speaking to you firmly against Enbridge's proposal to build the Northern Gateway pipeline and to the transportation of bitumen by way of supertankers to destinations in Asia or anywhere, for that matter.
22106.           I would like to speak to you today about three main areas of concern for me; namely, the eventuality of an oil spill from the pipeline from supertankers, the devastating impact a spill will have on our environment and its inhabitants, and the negative socioeconomic impacts that will result if this proposal goes through.
22107.           We're all aware that Enbridge is proposing to build a pipeline of over 1,100 kilometres in length through complex and unforgiving geological landscape, a pipeline that would carry an estimated half a million barrels of tar sands crude oil per day from Alberta to its destination port in Kitimat, to then be loaded onto supertankers and shipped to Asia.
22108.           The pipeline would travel across important salmon rivers, coastal rainforests and across three of this continent's most important watersheds, the Mackenzie, the Fraser, the Skeena, two of which are vital salmon-bearing watersheds as well as habitat for the critically endangered mountain caribou.
22109.           The geology of this area is extremely remote and prone to seismic activity, including the threat of landslides along many portions. Over the past 33 years alone there's been six catastrophic landslides affecting pipelines in British Columbia. Hindsight shows us a pipeline simply cannot be built to withstand serious landslides.
22110.           Enbridge's own assessment plan says they intend to examine terrains of up to 500 metres from the pipeline's route to determine the potential for hazards. The reality of this confounds me given that the landslides, for instance, would start much further away and travel considerable distances before destroying whatever is in their path.
22111.           Enbridge's chief geotechnical engineer went on record to say that while they plan on looking at different types of terrains on which to build a pipeline, routes would ultimately depend on cost and the time available to change where the pipeline is going. This is not at all reassuring and downright reckless, in my opinion.

**Oral statements**  
**Exposés oraux**

22112. Besides the threat from landslides is a threat from earthquakes. Much of the proposed path, including the shipping terminal in Kitimat, is located in a hotbed of seismic activity. Two recently released studies have indicated that we stand a 10 to 15 percent chance of a mega earthquake over the next 50 years, and just a few months ago we witnessed a very large earthquake near Haida Gwaii close to the proposed supertanker shipping lanes. You know, in the months following smaller yet equally dangerous aftershocks have been recorded throughout the region.
22113. Enbridge says this won't affect tanker traffic, but as many critics of the pipeline have stated, including a recent Geological Survey of Canada study that tsunamis are a very real possibility in this region and that they will affect shipping traffic.
22114. In addition to the risks of natural disasters posed towards these spills or from -- you know, from the supertankers, there is a risk of oil spills caused by their cargo, namely the diluted tar sands crude known as bitumen or dilbit. The environmental impacts of bitumen production are well documented, but the risk from transporting them is not at all well known.
22115. It is a highly acidic and corrosive and not at all the same as conventional oil. It is far more likely to cause corrosion in the pipelines as well as in the tankers that transport them. This is because the transport of bitumen requires pipelines to operate at significantly higher pressures than conventional crude and because bitumen is far more abrasive in nature due to the sediment that it carries. These sediments increase the amount of erosion within pipeline and tanker holes, making diluted bitumen a sort of liquid sandpaper, if you will.
22116. Despite the significant differences between conventional crude and bitumen, the National Energy Board's minimum standards for oil pipelines does not differentiate between the two and, to me, this is extremely alarming.
22117. The hazards a diluted bitumen spill would pose to the environment and to public safety are much more far-reaching than a conventional oil spill. Bitumen releases toxins that do not biodegrade and will accumulate in the environment and in the food chain. These chemicals will become persistent health hazards to wildlife and to people.
22118. Bitumen spills also pose significant challenges for clean-up efforts, particularly in rivers and wetland environments, because unlike conventional

**Oral statements**  
**Exposés oraux**

- crude, bitumen is heavier than water and will therefore sink in water columns and in wetland sediments.
22119. The containment and clean-up of a bitumen spill requires significantly more personnel, equipment supplies and delivery of resources, which would be hampered by things out of Enbridge's control such as the weather, the remoteness of the spill, winter snows, flooding and potential for avalanches and rock slides.
22120. Excuse me for one minute.
22121. If the bitumen was successful in reaching Kitimat, it would then be loaded onto supertankers which would traverse the 185 kilometres of intercostal water, including the Douglas Channel, before reaching an open ocean in the unpredictably dangerous Hecate Strait, Queen Charlotte Sound and Dixon Entrance.
22122. There is a reason that large oil supertankers have not been used in these waterways in the past. The route poses many navigational challenges. The risk of an oil tanker spill is extremely high along the B.C. coast because of the unique topography and poor weather conditions that make navigation difficult, if not impossible, at times.
22123. The coastline is full of narrow inlets peppered with thousands of rocky outcrops and islands lined with underwater ledges and rife with unmarked hazards. The coast is often battered by wind storms and gale storm force winds with 10-metre high waves, while precipitation and fog often reduce visibility next to nothing.
22124. The Hecate Strait, the main body of water for the proposed route, is considered one of the most dangerous bodies of water in the world, as we've heard, because of the quickly changing wind and sea states. In 10 years, from 1999 to 2009, there were over 1,200 marine vessel incidents along this coast, including collisions, explosions, groundings and sinkings. The narrow passages of this part of the coast are unforgiving and allow little room for error.
22125. Just a few months ago, there were two ships that ran aground near Kitimat, both navigated by pilots with 20-plus years of experience. I mean, this is unavoidable.
22126. A bitumen spill from the Northern Gateway pipeline will have

**Oral statements**  
**Exposés oraux**

- significant impact on salmon, a central component to this province's ecology, culture, economy and social fabric. Wild salmon represent one of the region's most productive biological communities, sustaining diverse, terrestrial and aquatic life while reflecting the overall health of the ecosystems that they support. Devastation from a major oil spill would destroy economically important salmon habitat, including the habitat of the Spirit Bears and grizzlies and whales and orcas and other marine life that depend on it.
22127. Wild salmon also supports a valuable recreation -- recreational tourism, sport fishing and commercial fishing. The commercial salmon fishery in B.C. alone is worth an approximate value of 250 million to our economy alone.
22128. In conclusion, the Government of Canada should reject north coast oil tanker proposals as a matter of policy. We should reject the proposed Northern Gateway pipeline project and restrict further bitumen pipeline development immediately.
22129. When we nurture and entertain the thought of building infrastructures such as pipelines and tankers to support the fossil fuel industry, all we are doing is increasing the incentive to use fossil fuels for a longer time and decreasing the incentives to research and invest in cleaner energy technologies.
22130. Let's face it; Enbridge is a company with one mandate, which is to make as much money for shareholders as possible. Their concern for the environment sits below their need for profit. They are only held to these environmental standards recommended to the federal government, and ultimately, what we the people, backed by science, say is acceptable.
22131. The threat of an oil spill or a pipeline rupture is far too great, and as history demonstrates, the taxpayers will be the ones on the hook for the clean-up. The environment will suffer and will never again be the same. We need to look no further than the Exxon Valdez spill or the BP spill in the Gulf of Mexico, both of whose effects have been devastating on the environment and tourism still years after.
22132. No matter what technologies we develop or put in place, we can simply not pretend to manage the element of human error.
22133. **MEMBER BATEMAN:** Mr. Hananansingh, I'm sorry to interrupt you. Your time is up and you're over. Can I invite you to summarize your

conclusion in one last sentence?

22134. **MR. DEREK HANANANSINGH:** And I've got one sentence left.  
Thanks.

22135. So my last sentence is we really need to spend our time and investments here working on removing our dependency on dirty oil from the tar sands, and by developing alternative energy options instead. I urge you to bring this message to the federal government that the Northern Gateway proposal is dead and should not go forward.

22136. I thank you for your time.

22137. **THE CHAIRPERSON:** Thank you for your oral statements this evening.

--- (A short pause/Courte pause)

22138. **THE CHAIRPERSON:** Good evening. Ms. Mickelson, please proceed with your oral statement. Thank you.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. JAC-LYN MICKELSON:**

22139. **MS. JAC-LYN MICKELSON:** Good evening. My name is Jac-Lyn Mickelson and I'm really grateful to be able to speak today at this public hearing, and thank you very much for strongly considering my statement.

22140. The threat of the proposed Enbridge pipeline affects me in my ways. I have grown up on the west coast and my family's always been heavily involved in recreational and sport fishing. Now my husband and I have a fishing boat and every summer we spend countless hours out on the water, and we enjoy fresh wild salmon, halibut and prawns as a result of this.

22141. I am speaking today in fierce opposition to the proposed Northern Gateway Pipeline Project. I am not just here to speak for myself, but also for my husband, who's here today supporting me, and for numerous family and friends who aren't comfortable speaking at such a forum today. I am also speaking for the animals that reside in or near the sea, as they clearly do not have their own voice.

**Oral statements**  
**Exposés oraux**

22142. The pipeline is a mistake, because despite the supposed safety precautions, all experts say that spills can and eventually will happen. The pristine west coast of B.C. would suffer indefinitely. The tankers would be travelling through treacherous waters, including the Hecate Strait, which according to Environment Canada is the world's fourth most dangerous watercourse, a place where swells can get up to 26 metres high.
22143. We keep hearing about the economic benefits from the pipeline, but the risk far outweighs any possible economic gain. An oil spill would decimate our local economy. Our coastal communities and towns thrive on having a healthy ocean ecosystem, an ocean that when it's working properly brings wild salmon that can spawn here, that draws orca whales, humpback whales, porpoises and sea birds.
22144. There are also so many businesses that are related, in one way or another, to having a healthy and oil-free ocean. For example, the hundreds of commercial fishing boats and fishing charters that make their living from fishing and taking others to enjoy getting an opportunity to fish as well. Whale watching boats, hotels, restaurants and entertainment, tackle shops, boating stores, these are just some of the facets which make up the prolific tourism and recreation industry along the coast.
22145. I wanted to get a firsthand account of how an oil spill affects a community. I thought the best way to do this would be to call and research about people who lived through an oil spill to find out how they were impacted. This -- the oil spill I am referring to is the 2010 BP oil spill off the Gulf Coast. I chose to call people who lived in Louisiana. I spoke with the fishing captain named Jay Trossakit who lives in Biloxi, Louisiana, which is 117 miles from the site of the BP oil spill in 2010.
22146. He said that many thousands of sea turtles drowned in the oil, suffocating, and people, including him, still see dolphins washing up dead on the beaches as a result of the spill. He also said that part of the reason the spill hasn't affected Biloxi as much as other areas is because there are two islands called Ship Island and Horn Island, which are 12 miles south of them, which block the tar balls from reaching Biloxi.
22147. Tar balls are constantly washing up on their beaches, according to him. This barrier island with its once pristine white sand beaches once served as a refuge for sea turtles, alligators, pelicans, ospreys, herons, and other migratory

- birds.
22148.           Reportedly, if you were to be on the island now you couldn't avoid the stench of oil and the gooey tar mats and tar balls that litter the beaches. Unfortunately, the oil is not degrading on the seafloor as previously predicted and instead, the island sees new waves of contamination after each and every storm, and I know this is something that could happen here.
22149.           I have been reading countless heart wrenching stories about people whose livelihoods have been ruined because of the 2010 BP oil spill. I am sure they feel they have been long forgotten. Stories that were front and centre in the media barely make the news today, no one talks about how they've lost their jobs, their hopes, and their futures.
22150.           The fishermen, shrimpers, and crabbers of the Gulf Coast, who have often been doing this their whole lives and sometimes for three generations, know that the fact that their catches are at record lows are not a coincidence. They know that the oil spill is to blame for the fact that they can no longer make a living by fishing, shrimping or crabbing.
22151.           One fisherman, named Lawrence Salvato, quoted in the Associated Press, said that in 2009, the year before the BP oil spill, he made \$75,000 in seafood sales, and last year, one year after the spill, he made only \$10,000. Surely that's not enough money to put food on the table for a family. This is not a coincidence.
22152.           After speaking with the Tourist Information Centre in Pensacola, Florida, they said that even though they were further away from the spill, and for the most part, it has been cleaned up, they deal with negative media regarding the spill. This obviously greatly affected their image with regards to whether tourists want to visit this area.
22153.           This is an exact situation that could occur in B.C., because even if an oil spill does occur, and get cleaned up for the most part, we could deal with the negative media fallout in terms of people associating the west coast of B.C. with an oil spill and not wanting to visit here, and would you blame them.
22154.           Even though it's a different context, the reason I've illustrated what happened in the Gulf is because the long-term impacts on the ecosystem, economy and tourism are the same as what could happen in B.C. A community



**Oral statements**  
**Exposés oraux**

- doesn't ever fully recover from an oil spill, not to mention that the bitumen that would be shipped from Enbridge's pipeline is unpredictable.
22155. And according to the Globe & Mail article, dated August 26<sup>th</sup>, 2012, Dr. Lee, who is a specialist in oil spills, says that more research needs to be done on the chemical composition of bitumen as Enbridge does not take into account that it is different from normal crude oil. In addition, according to a recent study by UBC, the estimated cost of cleaning up just one spill would outweigh any economic gain.
22156. To allow the Enbridge pipeline into our backyard would be irresponsible and shortsighted. I am a Grade 6 teacher and I want to look out for the future of my students as well as for future generations, not to mention I would rather be teaching my students about the incredible wildlife and opportunity we have on the west coast as opposed to how we will clean up an oil spill.
22157. Thank you.
22158. **MEMBER BATEMAN:** Thanks for your presentation.
22159. Ms. MacDonald, please go ahead and share your comments.
22160. **MS. SUSAN MacDONALD:** Thank you.
22161. **MEMBER BATEMAN:** Okay.
- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. SUSAN MacDONALD:**
22162. **MS. SUSAN MacDONALD:** My name is Susan MacDonald; I teach high school English and facilitate outdoor education programs at St. Michael's University School, a university preparatory school here in Victoria.
22163. I am not a resident of northern British Columbia, nor am I a Canadian of Aboriginal descent. I do not stand to gain or lose a livelihood as a result of the development of Enbridge's proposed Northern Gateway Pipeline Project, but I feel it's my duty to come here today to be an ally to Aboriginal Canadians and citizens of northern B.C. in voicing my opposition to this pipeline.
22164. I come here today as a British Columbian and a coastal citizen to say that the risks of the Enbridge Northern Gateway pipeline are too great and the

**Oral statements**  
**Exposés oraux**

- potentially disastrous consequences on our environment too profound and irrevocable to allow this project to proceed.
22165. We cannot save every natural area from resource extraction and development, but we can decide that there are some pristine and unique wilderness areas that we must preserve and protect. Haida Gwaii, the Northeast Pacific Marine Ecoregion, and the Great Bear Rainforest constitute such an area.
22166. Two years ago I spent my summer holiday car camping in northern British Columbia just north of the proposed route of the Enbridge pipeline throughout Prince Rupert, Terrace, Smithers, Stewart.
22167. Four years ago, I travelled over land and by boat throughout Haida Gwaii. Words are insufficient to express the phenomenal beauty and abundance of this region. You have to experience this environment directly to truly appreciate what is at stake here, including Sgang Gwaay, a UNESCO world heritage site. The Gwaii Haanas National Park Reserve is an area that is environmentally and culturally unique in the entire world, and by any standard, it is awe-inspiring.
22168. In both Haida Gwaii and northern B.C. I was overwhelmed at the abundance of life; humpback whales, porpoises, sea lions, sea otters, salmon, herring, seabirds, anemones, abalones, sea stars, eagles, grizzly bears, black bears, the list goes on and on. The Northeast Pacific Marine Ecoregion is known worldwide for its diversity and productivity. Many of the organisms in the food chain are filter feeders and thus are extremely sensitive to the addition of pollutants to the ecosystem. Why would we ever even consider subjecting such an area to an oil spill?
22169. Were oil tankers to travel in these waters an oil spill would be inevitable. The question is not an if but rather a when and the issue is simply one of magnitude. The waters of the Hecate Strait are among the most treacherous in the world. The channels through which the tankers would have to travel to Kitimat are narrow.
22170. I appreciate the engineering and technology purported to prevent disaster, including monitoring systems and double hulled tankers, but the fact is that human error, complacency and neglect lead to accidents.
22171. The cases of the Exxon Valdez and the BP Deepwater Horizon are

**Oral statements**  
**Exposés oraux**

only the most heinous and notorious of such instances, and in both these cases the oil company's responses to these tragedies were slow and insufficient and their communications with the public dishonest.

22172. Even a cursory historical review of oil and pipeline companies' records on prevention and response to environmental accidents reveals that profit incentive and public relations come before protection of environment and communities.
22173. Enbridge's safety record provides no reassurance. Using data from Enbridge's own reports, the Polaris Institute calculated that 804 spills occurred on Enbridge pipelines between 1999 and 2010, releasing over 150,000 barrels of crude oil into the environment.
22174. In 2009 the State of Wisconsin reached a legal settlement with Enbridge for 545 environmental violations. Wisconsin's Attorney General, J.B. Van Hollen, stated that, quote:
- "The incidents of violation were numerous and widespread and resulted in impacts to the streams and wetlands throughout the various watersheds."* [As read]
22175. Just two years ago, the U.S. National Transportation Safety Board's report on Enbridge's handling of the 2010 Kalamazoo River spill, in which almost 850,000 U.S. gallons of crude oil leaked from a pipeline, derided Enbridge for its, direct quote: *"culture of deviance from regulatory requirements"*. The report said that Enbridge acted like, again a direct quote: *"the keystone cops"* and ignored safety procedures while suffering pervasive organizational failures.
22176. In Canada, Enbridge is currently engaged in misleading public relations in its portrayal of its Northern Gateway Project, including an inaccurate, falsified rendering of the pipeline's proposed route in a 2011 computer-generated route animation, one in which Enbridge grossly distorts geographical realities in order to downplay the environmental hazards of the Douglas Channel. Citizens of British Columbia cannot trust Enbridge to put the public interest first regarding possible oil spill or environmental disaster.
22177. Before I close, I want to speak from my role as a high school teacher as someone who's worked with children and youth my entire career. At my school, in addition to my classroom teaching, I am the coordinator of experiential

**Oral statements**  
**Exposés oraux**

- learning programs. My colleagues and I created these programs because of our deep conviction, supported by research, that hands-on learning experiences and life skills, particularly in the outdoors, help students develop resilience, courage, teamwork, compassion, leadership and environmental stewardship.
22178. I've seen first-hand how experiences in pristine B.C. wilderness have transformed and inspired young people. They have experiences of profound joy, of deep interconnection with other people and with the natural environment. They perceive the potential of the world and the potential in themselves in different ways.
22179. My comments will probably sound cliché to those who have not had such experiences, but they will ring true to anyone who has experienced a direct deep connection to nature and we must have direct experiences with nature to appreciate its worth, to understand how we are connected to it and why we must protect it.
22180. There are fewer and fewer wild areas that remain. We truly destroy parts of ourselves when we destroy these last sanctuaries of wilderness. Once they're gone, they're gone. A classroom lecture is not lived experience. I do not want to imagine myself speaking to my students about a past of pristine coastal wilderness in Haida Gwaii. I want my students to be able to experience such wilderness for themselves. We owe our children and ourselves this legacy.
22181. I've been a coastal citizen my entire life and I am deeply in love with the ecologically abundant environment in British Columbia. Sometimes the costs of development are simply too great. We cannot accept an oil spill in the coastal waters of the northwest Pacific marine eco-region.
22182. I passionately advocate the rejection of the proposed Enbridge Northern Gateway pipeline and a ban on crude oil tankers, so at Hecate Strait, Dixon Entrance and Queen Charlotte Sound. Only in this way will we create and protect a legacy for British Columbians and for all Canadians. Thank you.
22183. **MEMBER MATTHEWS:** Thank you.
22184. Ms. Molchan, thank you for coming this evening, taking the time to present your views. Please begin.
22185. **THE CHAIRPERSON:** Just before we do that, can we just move

that water pitcher. It's threatening to blind a couple of us. Thank you very much.

22186. **MEMBER MATTHEWS:** I can see.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. PATRICIA MOLCHAN:**

22187. **MS. PATRICIA MOLCHAN:** Hi. Dear members of the Joint Review Panel, my name is Patricia Molchan and I live in Victoria B.C.

22188. I've had some time to listen to a number of the oral statements presented to you over the past few days and have been blown away by all the thoughtful and well-researched information presented by many of these people. I would publicly like to thank them for all of their time and effort.

22189. Although I have done some research in compiling my comments, most of my statement includes documented common knowledge along with a good dose of common sense. I'm not an expert on the integrity of pipelines, oil tankers or the environment, but that doesn't mean I don't understand what is at risk here.

22190. What I am is someone who cares deeply for her beautiful province and precious coast and what I have to say is said with much respect, not only for the natural environment, but for the majority of British Columbians who truly see -- want to see our unique province protected from projects such as the proposed Enbridge Northern Gateway pipeline.

22191. So that's the last time I'm going to say Enbridge Northern Gateway pipeline. From now on it's the pipeline. So the pipeline proposal is based on growth economics. So it might appear to be a great idea if building wealth were the only factors here. I would like to talk, however, a bit about ecological economics, which is a field of academic research that aims to address the interdependence and co-evolution of human economies and natural ecosystems over time and space.

22192. The economy is treated rather as a sub-system of the ecosystem and its emphasis is upon preserving natural capital so, for example, a stock of trees or fish provides a steady flow of new trees or fish and a flow that can be indefinitely sustainable. Ecological economists emphasize strong sustainability and reject the current thinking that natural capital can be replaced with man-made capital.

22193. So the proposed pipeline and the bitumen that it would transport is not

economically sustainable and doesn't fit into ecological economics. In fact, First Nations people truly understand natural capital and have been supporting ecological economies for as many years as they have been on our planet and we have a lot to learn from them.

22194. Let's be real here. It's been proven time and again that pipelines leak and Enbridge has a terrible track record of more than its share of pipeline leaks across North America. Earthquakes, tsunamis, the corrosive nature of bitumen, joints that leak, the inability to effectively monitor or even access pipelines in remote areas are all factors that none of us can deny.

22195. In fact, it's not if a leak will happen, it's when, and Enbridge's strategy is only to minimize the effects of those leaks. So nothing that Enbridge can say or do will mitigate the impact of a pipeline or tanker spill because any spill into our waterways would be disastrous. "Oops, sorry, folks" is just not to cut it from Enbridge.

22196. As you know, salmon migrate up our rivers and streams and they are the lifeblood of not only our fishery industries in B.C. rivers and along our coast, but they are a major food source for the whale populations and other aquatic species, for bears, wolves, eagles and so on, plus they are a major source of nutrients for our forests. Without the salmon, the rest of the ecosystem eventually falls apart.

22197. So what would happen if a stream or river was hit with an oil spill? The salmon in that area would be majorly impacted, along with the whales, the bears, the wolves, the eagles, the trees, First Nations people, salmon fishery, sports fishing, fishery industry, on and on. Everything is tied together and it would devastate the livelihood and way of living for far more people than might possibly benefit in the short term from the development of this pipeline and it would be a disastrous legacy for future generations.

22198. And now let's look at the tanker ships that would be navigating through Douglas Channel and along our coastal waters. That presents even more risk, and we all know what I mean when I say that no amount of PR, fudging of maps, will change the fact that the Douglas Channel which runs from Kitimat down to Hecate Strait is inundated with islands, narrow passages with very high and low tides, rocky shoals, hairpin turns and often zero-visibility fog. In some cases, it likely won't make much difference if a tugboat is helping to manoeuvre these huge ships around the narrow passages. An immense ship doesn't turn on a

- dime and the probability of a ship running aground is very real no matter how careful and responsible ships' pilots are.
22199. As a recent example, let's bring up the Shell fiasco in the Gulf of Alaska. The tugboat cables broke three times. Unbelievable, but it still happened. It was luck alone that didn't turn this event into a major disaster.
22200. And then there's the ocean to contend with through Hecate Strait. Massive waves are not uncommon and have been recorded to higher than 30 meters. It's hard to picture and to imagine just how big those waves would be, but should a ship lose its steering, any large wave could sink it or run it aground and cause a disaster so huge that no amount of so-called clean-up would change the negative outcomes to the ecosystems.
22201. These huge tankers would be traversing through the Great Bear Rainforest, a pristine, ecologically sensitive reserve. Allowing this type of activity within this forest -- or this area, just doesn't make any sense, ecological or otherwise.
22202. Economic growth of this sort is not even remotely sustainable and the long-term negative impacts are devastating. We can't continue to use, abuse and put our natural environment in jeopardy, nor ignore the fact that our Mother Earth is not limitless and what we do to our planet does affect all of us, both present and future generations.
22203. And of course, this proposed pipeline is about far more than just moving some oil from point A to point B. It's about the political decision to increase development of the Alberta tar sands.
22204. This is wrong on so many levels. The blight of the tar sands and the false perception that it's the saviour to our Canadian economy is extremely disturbing to me.
22205. The tar sands' contribution to global climate change has been well-documented and a recent study has even confirmed that tar sands development is polluting nearby remote Alberta lakes with increasing levels of toxic carcinogens. And this study disproves long-standing claims that waterway pollution in the region is naturally occurring.
22206. I appreciate that you listened attentively to my words. I personally

**Oral statements**  
**Exposés oraux**

- struggled with my decision to actually come today to speak because what I came to say has been repeated over and over and over again. I can hope that it will only reinforce your decision to reject this proposal as totally unsuitable for British Columbia.
22207. As a close, I want to reiterate that I do not support the proposed Enbridge Northern Gateway pipeline. And I encourage you, the Joint Review Panel members, to strongly oppose this pipeline proposal as well.
22208. Instead, the current federal government needs to represent Canadians for the long term by encouraging serious development of clean, green, sustainable energy alternatives. And the shareholders of oil and related industries should care about sustainability for their share stock by insisting that these industries get out of the dark ages and diversify into developing never ending and virtually risk free energy sources such as sun, wind, wave, geothermal, et cetera.
22209. I thank you very much for your consideration of my comments and concerns.
22210. **THE CHAIRPERSON:** Thank you to each of you for your oral statements this evening.
22211. We'll -- the Panel will just take a five-minute break as we change over to the next set of speakers.
- Upon recessing at 8:48 p.m./L'audience est suspendue a 20h48  
--- Upon resuming at 8:54 p.m./L'audience est reprise a 20h54
22212. **THE CHAIRPERSON:** Thank you for your patience.
22213. Ms. Nygard, please present your oral statement. Thank you.
- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. LORRAINE NYGAARD:**
22214. **MS. LORRAINE NYGAARD:** Good evening and thank you so much for hosting this -- your long days, long weeks, really appreciate your time and your patience. I've listened to others and you sound very, very kind to present to.
22215. I apologize for not being more organized this evening. I'm a single



**Oral statements**  
**Exposés oraux**

- mother of five kids and work two jobs to try and make ends meet. I've done all I can to make notes and hopefully I make some sort of cohesive statement, but if I'm looking a little disorganized, forgive me.
22216. I also want to give apologies in advance. I might get a bit passionate and make some statements about Enbridge or what I'm finding very, very -- I'm just despaired with our government right now. So apologies in advance.
22217. I'm not pointing fingers at anybody on the Panel or in the room. I'm just speaking from the heart of what I'm seeing in our country right now and I wanted to just state that.
22218. **THE CHAIRPERSON:** And we hope you'll do that in a respectful nature.
22219. **MS. LORRAINE NYGAARD:** Thank you. Yeah.
22220. All right, so you know my name is Lorraine Nygaard. I'm born and raised in Victoria, went to Vancouver for five years. I lived in Tokyo for 13 years, marrying a Japanese man and running a business there. We had a café.
22221. I am a mother of five. I now run a bed and breakfast. It's been 16 years -- I've been on my own there for four years and still doing very, very well despite the global -- or the economic uncertainty. I'm a fitness instructor. That's been 16 years including personal training and yoga fit. I'm an Esquimalt United Church member.
22222. And I guess the biggie that made me kind of an environmentally aware girl is when I was 20, I got a melanoma on my back. I have a massive skin graft on my back. And when you're 20, it sort of impacts you like, wow, human activity really does have an effect on what's going to happen in our health. And that kind of has always made me very, very aware of what we're doing to our environment.
22223. And when I came back from Tokyo where semi truck trailers there would run their car engines, and I thought, "That's just wrong," came back to Canada and it's the parents of school children that are running their car engines and I'm thinking, "That's just wrong."
22224. So I ran the Way To Go program, which is encouraging parents to get

**Oral statements**  
**Exposés oraux**

- out of their cars and allow their kids to use their bodies to get to school. Macaulay School, we won the B.C. award. We were the top school and had huge impacts.
22225.           So what does all this got to do? It just -- you can see where my environmental concerns are. Okay?
22226.           In your -- what we're supposed to speak to today, project's effects and how is it going to affect me.
22227.           So as a proud Canadian that has recognized her social duty to protect the environment for future generations, this whole proposal has affected my body and my being. It is based on corruption, based on greed and does nothing to further the pride of our nation. If it were to go through, we would be a disgrace on the globe.
22228.           I want to see alternative energy sources to be developed and encouraged in this country. I want to see people getting out of their cars which rely on gas and using their bodies to get around. Inactivity, stress, gas fumes are all big ingredients in the degradation of our health.
22229.           Sales of our precious resources to other markets for development is ludicrous. If we want to create jobs, why not keep processing here at home? Personally, I would love to see the tar sands halted, but we're not allowed to address that issue here. We're just talking about a pipeline.
22230.           I work in tourism. In my B&B, I've hosted thousands of visitors to B.C. from all over the globe. Sometimes they are in B.C. for an entire month. They come here because it is beautiful, natural, we respect the environment, the air is clear and delicious. Northern B.C. where the pipeline is proposed has become really attractive as a gorgeous back-to-nature destination.
22231.           This past summer, I had my first solo holiday in 28 years and my first summer holiday in 16 years. I hopped on my bicycle and I headed north up Vancouver Island, across to Whistler, Kamloops, Blue River to Jasper, through the Ice Fields to Banff, west again through the Kootenays and down to Creston, my parents' home town where I had spent many summer holiday as a young girl.
22232.           Two experiences that are embedded with me that resonate with this proposal. Number one, we do not need more money to be happy. I did that trip

**Oral statements**  
**Exposés oraux**

- very, very inexpensively and it was elation beyond belief. We need to be in nature, be in contact with our breath and our body in an environmentally correct fashion.
22233. The other thing that resonated with me was in Lillooette and the road leading up to Cash Creek, there was a concrete plant there as there was in Skookum. And the sadness of the First Nations working these plants did distress me. I was pretty happy; why did they have to have such a horrible job?
22234. So why did I get on that trip? I could have gone to Maui, laid by the pool, had martinis, but no, I wanted to use my body. I inhaled fresh air, I slept under pine trees, under stars and I smelled clover and was elated to hear the rush of streams and waterfalls, countless, and they brought me joy beyond measure. I was brought to tears at the beauty of this province.
22235. So I have to go back -- one moment, please. I'm so sorry. Aha.
22236. Victoria's tourism industry sees \$1.4 billion pumped into the economy. Vancouver Island enjoys \$2 .5 billion. The imagery of northern B.C. during this whole Enbridge proposal has only made that area more desirable to the global market.
22237. Imagine First Nations being able to capitalize by just sharing their surroundings and not having to be reduced to working the line because a company that bullies their way into an area with eminent domain status has destroyed all that was once breathtaking. I think that would be really, really neat if they could just host like I'm able to host. It would be amazing. What a happy, happy thing.
22238. Is the project in the public interest? Let's look at the company. If I were a municipal Councillor and a company was wanting to come into my municipality, I would have to look at the company and say do we want these people in our midst?
22239. Economically, their net value is not what it should be. I'm a small business owner, but I look at their revenue of \$19.4 billion, and then after expenses they're only making \$991 million. I don't think they're doing something right there. That's not a very good profit margin.
22240. Socially, Enbridge has ruined many lives by encroaching on private lands. I've got three minutes? Environmentally, their track record is abysmal and

I don't have to reiterate what everybody else has said.

22241. Morally, I would be sick to my stomach if they were allowed to operate on our soil.
22242. Health-wise for our future, opening oil markets does nothing for our health. There are alternative energy sources that are safer and are being developed as we speak. Canada can be seen as a leader in these technologies if our government would allow this to happen. There was a woman speaking earlier, solar technology was huge. I fear that the pockets waiting to be lined with dirty oil money are not eager to come up slightly wanting when their plans fall through. And I'm quite sure they will.
22243. You ask if I recommend this? And I say absolutely not. I do not recommend it whatsoever. You asked for terms and conditions of the project were to proceed. There are none. This project must not go through. The safety record of Enbridge is atrocious. Their social record is atrocious. The effect on the environment is consolable.
22244. It would be nice to think that we can place terms and conditions, but when we are dealing with a company that does not follow through, they are not to be trusted.
22245. Thank you so much for your time, and I hope you take all of this to heart and take it to our leaders that are making decisions that I fear this whole process is just to console us and that the bottom line is going to be to heck with what the people think. That's how Harper's government is working. I hope that you can do something to persuade them otherwise.
22246. Thank you so much.
22247. **MEMBER MATTHEWS:** Thanks for your presentation and thanks for taking the time out of your busy schedule. That's great.
22248. Okay. Mr. Slade, I understand that you have something to show. Can you describe it just for the people listening on the computer, on the webcast?

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. DAVID SLADE:**

22249. **MR. DAVID SLADE:** Oh, absolutely.

22250.           **MEMBER MATTHEWS:** Okay.
22251.           **MR. DAVID SLADE:** This is a picture of my two-year old grandson Oliver. He is a happy, healthy boy living in Victoria here, and I'm representing myself and then my grandson Oliver. Do you have any grandchildren?
22252.           Yes. Yeah. And the applicants too? Children? I'd just like you to think of people such as young Oliver when you're making your deliberations and your decisions in the future.
22253.           I've been taught that it's not okay to attack people, but it's okay to attack ideas. And I think there's some ideas here that seriously need some attacking.
22254.           So here I go. My name is David Slade and I'm here representing Oliver and all the children of his generation that will grow up to either praise the wisdom, foresight and courage of panels and hearings such as this, or perhaps damn us all for our collective blindness and greed.
22255.           I have a friend of Chinese descent who told me that he fears the power and the hunger of China. China's reaching around the world and grabbing natural resources from other continents to feed its growing appetite. Not only does it covet the vast oil reserves of the tar sands, but it is tying up coal properties in the southeast Rockies near Elkford B.C. and in the northeast Rockies near Hudson's Hope.
22256.           Time is of the essence and money appears to be no object for these endeavours of which I, as a drilling contractor, have recent first-hand experience, having completed a contract for a Chinese coal client in December.
22257.           This fact about China would not be alarming at all were it not for the reality that coal reserves in China are approximately 18 times what they are in Canada, making it the second most rich coal country on earth, while Canada is a distant 10<sup>th</sup> according to the British Petroleum's World Energy Review from June of 2012. Furthermore, China is now the world's largest producer of renewable energy leading in solar, wind, and hydroelectricity.
22258.           So what, you may well ask, has this to do with tar sands and pipelines? I am setting the stage for a very brief discussion on how the Government of China

- looks out for the long-term best interest of its grandchildren compared to how the Government of Canada seems to care very little about the future of its own grandchildren.
22259. China wants our fossil fuels. They want our oil -- they want our coal and they want our oil. And when they have sucked up all of the financially viable oil and coal from around the world, they will still have their own precious reserves. I used the term “precious” to describe fossil fuels, oil in particular. It is oil that has allowed our agriculture, our medicine, our science, our technology, our very civilization to thrive. Oil will be absolutely necessary for us to build the solar panels, the wind turbines that may power us into the future if our civilization is to survive once the oil is gone.
22260. I heard an economist recently say that Canada is leaving billions of dollars on the table because we do not have the pipeline and access to the offshore markets for our oil that it would provide. Would those billions make a better life, a better world for my grandchild? Would the money be serving the greater good of Canadians, or would it line the pockets of foreign owners and investors who have no conscience or concern for our best interests?
22261. Will young Oliver wonder when he is my age how we could have taken such a vast, amazing and precious resource, ripped it from the ground and shipped it by pipeline and tanker to China in only 50 short years or less?
22262. So what of pipelines? Pipelines are made of steel. And while China is responsible for nearly half of the world’s steel production, Canada produces almost none. So of course thousands of miles of pipeline representing millions of pounds of steel will probably serve the long term best interests of the Chinese steel industry, but it will have little long-term benefit for many Canadians.
22263. And what of giant oil and gas tanker ships? China is the second largest shipbuilding industry in the world. So the need for dozens of new ultra supertankers to carry our oil away will likely be a boom for the Chinese shipbuilding industry. Canada, on the other hand, has no shipbuilding capacity to speak of. And so Canadians will only be able to watch in awe as giant behemoths of ships carry our oil reserves and energy security off into the sunset.
22264. My point here is that when it comes to Canada’s fossil fuels, China’s best interests are 180 degrees opposed to the long-term best interest of Canada and the vast majority of Canadians.

22265. Many people say that collisions and crashes of supertankers will not happen since these giant ships will be equipped with the most modern navigation equipment and controlled by local pilots who are intimately familiar with the waters and hazards of Douglas Channel and British Columbia's west coast, a region where gale-force winds and white-out blizzard conditions are common.
22266. It is interesting to note that the B.C. ferry Queen of the North crashed and sank in 2006, even more interesting that the collision and sinking happened in clear weather and calm seas at Gil Island right at the mouth of Douglas Channel on the tanker route to Kitimat. Of course, that ship was equipped with the most modern navigation equipment and piloted by people intimately familiar with the waters. It strikes me as strange indeed that knowledgeable people do not think that a similar tragedy could befall one of thousands of supertankers that may one day ply those same waters throughout all seasons and all weather some 600 times per year.
22267. While on the topic of shipping disasters, the view from my parents' kitchen window overlooking Cowichan Bay was decidedly more interesting this Christmas season. There were three large cargo ships lit up and swinging gently back and forth on their anchors with the change in tide.
22268. The reason for this unusual display was because on December 7<sup>th</sup>, a large cargo ship in open inland waters controlled by the most modern navigation equipment and piloted by local experienced pilots crashed into the docks at Roberts Banks near Tawassen. The ship did not sink, but the collision caused enough damage to disable the facility to the point that ships were delayed for weeks waiting to access the port.
22269. So based on the knowledge that the west coast of Vancouver Island and northern B.C. is known as the graveyard of the Pacific and the evident frequency of maritime accidents, the question is not could these tankers crash, but when they do crash, how great will the tragedy be?
22270. Today, I learned on the Canadian Coast Guard website that an average year sees 6,000 search and rescue incidents in Canada are reported to the Coast Guard. Forty (40) percent of them are commercial. That means, conservatively speaking, there's 2,000 search and rescue incidents a year involving commercial watercraft in Canada.

**Oral statements**  
**Exposés oraux**

22271.           If we are desperate to find new markets and completely deplete our oil reserves in this century, why would we not build a pipeline to the east? Eastern Canada imports most of its oil from the U.S. Would such a pipeline not be a giant step toward energy security for all of Canada?
22272.           To the east are vast reaches of flat land and straight highways with potential markets, refinery sites and economic opportunity all the way from Saskatchewan to Quebec. Seismic activity is minimal. And cleared right-of-ways already exist for two railroads and the TransCanada Highway, providing guaranteed year-round access in case of a rupture.
22273.           To the west, on the other hand, are mountains, rivers, thousands of acres of wilderness. Seismic activity is significant and earthquakes, landslides and avalanches are guaranteed. This is a part of Canada where railroads and even the TransCanada Highway are closed for days at a time for avalanches, landslides, and sometimes just because of weather and snowfall, as in today.
22274.           In view of this reality, the nature of pipelines and the track record of Enbridge, we must assume that ruptures will happen. So when they happen in the winter, after an earthquake and a landslide, how on this earth would crews be able to make quick repairs, and what hope, if any, would there be of cleaning up the mess?
22275.           And how would poisoned lakes, rivers and mountains in B.C. wilderness serve the best long interest of Canadians in general and future generations in particular. I understand that this Panel is not charged with considering the potential impact on climate change that ever-increasing consumption of fossil fuels may have or the accelerating effect of pipeline projects such as Northern Gateway will have on consumption but we cannot ignore the body of evidence and science that has continued to pile up since these hearings began.
22276.           Most dramatic of which would not be the droughts, hurricanes, tornadoes or floods seen in astounding scale around the globe, but the wide open, ice-free Northwest passage seen for the first time ever this summer.
22277.           I cannot help but hope that these facts will weigh heavy on your consciousness and on your conscience when your final decisions and recommendations are made.



**Oral statements**  
**Exposés oraux**

22278. I'm just a humble welder from Cobble Hill. I'm not educated, brilliant or powerful, but I've read the words of brilliant and educated men. I speak for example of Ronald Wright who wrote "A Short History of Progress" and James Hansen who wrote "Storms of my Grandchildren".

22279. I sent copies of those books to 150 powerful people, including Members of this Panel. Did you receive them: "Storms of my Grandchildren, Short History of Progress"? You don't remember receiving those? They're a good read.

22280. If you've not done so already, I urge you to read them and pass them on. I believe they were written by sincere and brilliant men for the purpose of guiding others who may be charged with momentous decisions regarding the best long-term interests of their societies and their grandchildren.

22281. In closing, I want to acknowledge that I am part of the problem we must all face. I drove here tonight alone from Duncan in a gasoline-powered vehicle. I'm a partner in a water well drilling company that consumes a lot of diesel fuel.

22282. But I refuse to let these facts stop me from trying to be part of the solution. I will continue to do what I can to change my ways and to help slow this tide of destruction and turn these tankers away.

22283. I do this to try to secure a future for my grandson that has air that is safe to breathe, a future with water that is safe to drink, and a country and planet that he can probably pass on to his grandchildren. May you be guided in your decisions and deliberations by knowledge, wisdom and conscience.

22284. On behalf of myself and my grandson Oliver Slade, thank you for listening.

22285. **THE CHAIRPERSON:** Mr. Slade, I just want to let you know that the Panel only looks at things that are on the public record. And so those are the - - because we have to be very careful that all the information we look at is available to everybody. And so that's the material that we look at.

22286. Thank you.

22287. **MEMBER BATEMAN:** Mr. Smith, thank you for joining the Panel

this evening. Please present your views.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. ROBERT F. SMITH:**

22288. **MR. ROBERT F. SMITH:** I'm a retired professional engineer, retired for nine days, effective the 31<sup>st</sup> of December. My professional career spans some 48 years. For the last 14 years, I had a consulting practice here in Victoria, specializing in sustainability, environment, and energy management. Before that, I spent 34 years in the federal government, half as a civil servant and half as an officer with the Canadian Forces.
22289. As a civil servant, I was a Director of Environmental Stewardship for National Defence. I witnessed National Defence's program grow from \$10,000 and two-and-a-half staff to \$50 million a year and over 60 people. Our biggest challenge back then was petrol oil, and lubricants. Cleaning up, issues associated with the use, storage of fuel.
22290. My last project in Defence was to develop their sustainable development strategy. That strategy was judged best in government and I was -- got a commendation for that. But I am not here to speak from that context or that experience.
22291. In 1970, I faced the biggest challenge I've ever faced in my life. I was a young officer, Canadian military engineer officer, in Gagetown, New Brunswick, and on the 4<sup>th</sup> of February, 1970, a Liberian oil tanker ran into a rock in Chedabucto Strait and the biggest oil spill on Canadian shore occurred. And I was tasked to clean it up. So I've been there.
22292. When I flew in and arrived at first and was taken down to the shore, it was late in the day and I said, "Where's the problem". Next day, low tide, I didn't have any trouble finding a problem; 190 kilometres of coastline, tar all as far as you could see, left and right, and it was still floating.
22293. They spilled two and a half million gallons of Bunker C. Bunker C is probably lighter than tar sands because it floats. And 350 -- three and a half million gallons were unaccounted for. And at that time, the ship broke in half, half spilled and half was still in the bottom of the sea.
22294. So the troop that I commanded, we were to contain the oil that was still floating, clean up the oil that had spilled, and act as an immediate response

**Oral statements**  
**Exposés oraux**

- team should the other half break loose, and provide miscellaneous support and action.
22295.           We didn't lack for resources. I was told, you know, do whatever you can do. Above all, do nothing. You know, you must be seen to be doing something and you better do because we really didn't know what to do at that time.
22296.           As I recall, the commander of the task force that was set up, Dr. Shefford, got me on my radio and said he was sending a truck down with a 45-gallon drum and he wanted me to fill it with the product that was still floating. And he was going to take it away to get it tested. And I responded to him, "You tell me how to get the first barrel out, I'll get the rest".
22297.           That product was thick. It's thicker than peanut butter and it's sticky as chewing gum on the bottom of a chair. You could shovel it on a shovel, but you couldn't get it off.
22298.           Those days, a lot of us smoked. When you took a smoke break and you had it on your pants, your first step was kind of awkward. It was that goeey. We had pumps that tried to pump it, Archimedes' screws that tried to pump it. You couldn't pump this stuff.
22299.           And when we did get a barrel up -- that's rather interesting; at the end of the day, we were wearing hip waders and cutting the barrel off -- cutting a 45-gallon drum barrel down and fill it full of stove oil to clean ourselves up.
22300.           And we did that in the Arichat old Post Office, it was abandoned. It had a coal-fired furnace and there was a wooden shovel there. Bingo, I saw that wooden shovel. We soaked it in stove oil and that's how we filled the first barrel. Because with the wooden shovel with stove oil, it was slippery so we could actually shovel the oil out of the water, into the barrel.
22301.           When they tested that barrel, they found that oil and water don't mix, it was an emulsion, it was a total surprise. The time to find these things out is not after the fact, it's before the fact.
22302.           The slick licker was invented and its first run was there. I met Dr. Sewell. I understand he lives here in Victoria, I didn't realize until just recently. Anyways, that, you know, that cleaned up a fair amount. But, you know, it can't

- do anything about that that was on the shore.
22303. We did attempt to clean up some of the shore and we did clean up a small section of beach, we picked the beach up, literally, with front-end loaders and bulldozers and hauled it away. I'd say the ratio was about 100:1 oil to rock.
22304. I went back to that site five and 10 years later. The oil is still there. If you go on the web and Google Arrow oil disaster, you'll find there's a report 2003 by Environment Canada, it's still there. And you could smell it, black, thick, tuggly.
22305. It is -- you know, it probably shaped the rest of my career. That's why I was the Director of Environmental Stewardship for National Defence, that's why I left the military and moved into energy and environmental management.
22306. You know, it was just daunting to see that. It's not something you want to have to witness. And the only way -- it's impossible to clean up. Once it hits that shore and gets stuck like that, it's from high tide to low tide as far as you can see.
22307. And we had all kinds of people. There's a fellow from France that came. Every night, we met in the hotel room, the management team, you know, discussed what we did today and what we were going to do tomorrow and what we needed. And this fellow from France, in the sink put some Bunker C, took peat moss and actually turned it into a snowball. He could clean it up.
22308. So Canadian Tire, next morning, peat moss on the beach. Useless. You know, after the oil had been in the water, it had changed its property. It was now an emulsion, the peat moss didn't work. Not so bad, it'll work on the fresh that's still down in the sea. We bought all the peat moss, I swear, in the Maritimes and stacked it in Imperial Oil's parking lot. That's where that Bunker C was supposed to go.
22309. And, you know, Murphy's Law, you know every day, almost every day at 3 o'clock, it snowed. Then it would melt. So pretty soon, we had a football field full of peat moss that was frozen and soggy. And that's the peat moss that we're now supposed to spread on the shore.
22310. And when the time came -- there was people there from Germany that were actually trying to predict where it would hit the shore and had all their stuff

**Oral statements**  
**Exposés oraux**

- out and all their sensing instruments trying to figure out so that we would then know where to go. You know, some hope, you know, half the shoreline was inaccessible, but we would try, and for this frozen peat moss we got snow blowers. So we'd put it on the ground, and we would pitch the -- should it happen.
22311. One of the biggest accomplishments there is that the naval divers, bless their souls, actually got the other half out of that ship. They went on a barge called the Irving Whale. Murphy's Law again, they hauled that up to Quebec, but it sank off Prince Edward Island.
22312. In 1996 -- you may not recall -- you wouldn't have recognized the Irving Whale -- I knew exactly where that oil came from. They recovered it. You know, they found out that this -- the Irving Whale was deteriorating and we've got to clean it up, so they cleaned it up.
22313. So let me conclude with what did I learn from all this. Well, what I learned was wisdom doesn't come from study. Wisdom comes from showing up for life. So make sure those people show up for life and demonstrate that they got the technology on the ground in the situ, not in some sunny afternoon in a harbour or in a classroom or in a laboratory.
22314. Find out what happens to that water or that oil when it hits the ocean and sits there for a week. Find out what happens when it hits the streams, because it may be something different, and if this stuff sinks, you're going to have a hell of a time cleaning it up. A hundred and ninety (190) miles of coastline, at least you could get at it. You could at least pick it up with a dozer and a front-end loader, but if it's underneath at the bottom of the sea, it's going to be an even tougher job to clean up.
22315. The second thing, Murphy's Law is optimistic. When they test their capability to do it, I want them to do it on a Friday night on a call-out, and a Christmas long weekend so they're at a party and having a good time, and a big dump of snow so that they can't get anywhere, and when they get to their vehicles they find that their vehicles don't work and then the next day they find they had contaminated fuel. Things go wrong and things aren't -- don't always work, and you can't count on them. So they've got to demonstrate them and they've got to be prepared.
22316. At that time, you know, there was no contingency funds, you know, no

**Oral statements**  
**Exposés oraux**

liabilities. Those all came as a result of that oil spill. People then decided we got to put money aside, so there's money aside, but there isn't enough money put aside to clean up those oil spills. So my suggestion is that you have the Government of Alberta, Saskatchewan, the federal government, and the B.C. government back up in proportion to their benefits.

22317. So the royalties that Alberta is going to get, great. Back them up to clean up this stuff when you've -- if Enbridge has got a limited partnership, and they've only limited their liability, and the Crown has to pick up the rest, let the federal government share that in proportion to their benefits, not just the Province of B.C., not just the federal government, all the governments.

22318. And I thank you very much ---

--- (Laughter/Rires)

22319. **MR. ROBERT SMITH:** --- for listening to me and for allowing me to actually relive some of my youth. When I heard you were going to have the Panel, you know, I was in there like a dirty shirt because that was the biggest challenge I ever faced and I've had a great time reliving some of my experiences. I don't want anybody else to have to live it again for me. Thanks.

22320. **THE CHAIRPERSON:** Thank you very much, to each of you, for your oral statements this evening.

--- (A short pause/Courte pause)

22321. **THE CHAIRPERSON:** Good evening, Ms. Thorpe. Good evening to all of you. Please go ahead with your oral statement.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. LEAH THORPE:**

22322. **MS. LEAH THORPE:** Hello. I'd like to thank the Panel for allowing me to be here this evening. I would also like to sincerely thank all of the other presenters who have taken time out of their busy lives to prepare and present their oral statements. I know that preparing the statements has required a great deal of time and emotional energy for all of us, and I hope that the Panel will recognize that the fact that there are so many of us who have done so speaks to how strongly we feel about this proposed project.

**Oral statements**  
**Exposés oraux**

22323. My name is Leah Thorpe. British Columbia is my home and it always has been. It's often true that the things that we've always had are the things that we take for granted, and in many aspects of my life I'm sure that I am guilty of this, but I can honestly say one thing I do not take for granted is how lucky I am to live in this spectacular part of the coast.
22324. I've always had a fascination with the world around me. Growing up, I was fortunate to have many experiences in nature, and from a very early age, I took a particular interest in the ocean. Our marine environment is such an amazing place, filled with astounding life, diversity and mystery.
22325. As I began university, I followed this passion with extreme determination. I knew that studying the ocean was what I wanted to do, but the more I learned about the ways in which we humans impact our environment, the more I realized that conservation was the direction my career would have to take.
22326. I am very fortunate to have spent the -- most of my adult life working in tourism and conservation in British Columbia. This work has given me the opportunity to meet people who come from all over the world, specifically to see the vast wilderness and incredibly beautiful nature in this area. This is part of the reason why I do not take what we have here for granted. I have been lucky enough to repeatedly see things through the eyes of people seeing this spectacular area for the first time.
22327. I now work as a director of a local whale conservation society. Our mission is to help protect the environment and ensure that it is around for generations to come and not just human generations either. I believe that we have a responsibility, as the most destructive beings on this planet, to ensure that our actions do not destroy the environment that all species depend on.
22328. There are countless reasons why this proposed Northern Gateway Pipeline is a horrendous idea. There is no way that any of us could possibly list them all in the 10 minutes that we've been given to speak. The fact that it would travel through more than 1,000 kilometres of rugged, remote wilderness, crossing hundreds of bodies of water and carrying raw bitumen, an incredibly toxic substance, as we've heard, means that there would literally be thousands of opportunities for disaster every single day, and this before it would even reach the coast where it would begin the most treacherous part of its journey.
22329. Since I cannot possibly discuss all the ways in which things could go

**Oral statements**  
**Exposés oraux**

- terribly wrong, I will talk about what I know best, which is whales. It's no secret that humans do not have a pride-worthy history with these animals. We have tortured and tormented whales for centuries. They have been slaughtered ruthlessly and ripped away from their families and homes to be put into captivity for human entertainment, but humans' attitudes towards whales have largely changed over the last several decades. We now know that they are incredibly intelligent, social and complex animals, and instead of hunting them, we more often seek to watch them in their natural environment.
22330. One of the best places on earth to see whales in their natural environment happens to be British Columbia, and this is why whale watching is a very important part of our economy here. Whales to me represent hope. They represent the fact that humans can change their actions and choose to protect instead of destroy. But we still have a long way to go.
22331. Many of the large whale populations are just now starting to recover from Canada's whaling days. It's absolutely incredible to see them returning to areas of the coast where they were completely wiped out, but unfortunately these whales still have many human-induced obstacles to overcome.
22332. Noise pollution and ship strikes are just two such examples, both of which would be of enormous concern if we were to add the 200 to 300 supertankers per year along the coast that would accompany this pipeline project.
22333. Enbridge has tried to address the concern of ship strikes by promising to have a spotting vessel travelling 30 minutes ahead of the tankers to keep a lookout for marine mammals, but I wonder how they think this is supposed to help.
22334. Whales move, and even if the tankers knew they were about to enter an area where there were whales present, they would often be in narrow, treacherous channels and would not have the option to deviate course to avoid these marine mammals.
22335. The Douglas Channel which is part of the proposed route for the supertanker traffic is critical habitat for fin whales, humpbacks, Pacific white-sided dolphins, dall's porpoises and harbour porpoises. It is also considered to be one of the most challenging waterways for ships to navigate due to strong currents, exposed reefs and frequent strong winds. Having enormous supertankers navigate these waterways would be asking for disaster.



22336. Stephen Harper promises that science, not politics, will determine whether or not projects such as this will go through. Yet, he has cut funding to many of the science programs on the coast that would help inform these projects and allow for a proper assessment of the risk. We constantly hear reassurances that if this project goes through, it will be held to the highest environmental standards, but everything we have seen from this government recently shows that protecting the environment is absolutely not a priority.
22337. The Harper government has recently gutted the *Fisheries Act*, cut funding to a large number of environmental organizations and abolished the entire Marine Contaminant Research Department in B.C., and we're supposed to believe that if this project goes through, suddenly they're going to care about the environment. I've absolutely no faith in these empty promises.
22338. I would like to take a moment to discuss an incident that happened in 2007 on the B.C. coast. I know that others have mentioned it in previous statements, but I feel it bears repeating because it illustrates some important considerations here.
22339. In 2007, I was working in the Johnston Strait near northern Vancouver Island. On August 20<sup>th</sup>, a barge carrying logging equipment, tipped over in the Robson Bight (Michael Bigg) Ecological Reserve spilling several pieces of equipment into the water.
22340. This reserve is in the middle of identified critical habitat for the threatened northern resident killer whales. The reserve was created because it's a place where the whales frequent. It's also one of the only known areas in the world where the whales come to rub on underwater beaches.
22341. Despite the fact that this tragic event occurred in an ecological reserve, smack dab in the middle of critical habitat of a species listed as threatened under Canada's *Species at Risk Act*, it took more than 18 hours for the first hint of a cleanup crew to arrive. By that time the diesel fuel spill had dispersed and it was virtually impossible for any real cleanup to occur.
22342. I spent most of the next day watching, as a family of killer whales, who I know as individuals, swam through this slick breathing in toxic fumes. Killer whales cannot smell and therefore were likely unaware of the danger around them that day and in the days that followed. I have often wondered since

that time about the lasting impacts this event may have had on Blackney, Sitika and the rest of their family.

22343. In the days and weeks that followed this accident, there was concern that the worst may not be over. One of the pieces of equipment that had tumbled into the water was a diesel truck carrying approximately 10,000 litres of fuel. Many wondered if the truck may still be intact slowly rusting away at the bottom of the ocean, threatening to release a large amount of fuel at any moment.

22344. How did the government respond to this concern? I'd like to read a quote taken from the federal government website in the days that followed. It says:

*“Due to the significantly high evaporation rate of diesel fuel, the bulk of product released in the incident has dissipated. The Regional Environmental Energy Team and the Canadian Coast Guard are of the view that it’s highly [unlikely] -- highly likely that the submerged tanks imploded on descent releasing the fuel which evaporated on the surface of the water.”*

22345. This was their conclusion and this is where it would have been left had community members not rallied together and raised the money to conduct a proper investigation.

22346. Embarrassed, the government finally agreed to send a submersible down to investigate and what they found was the truck was, in fact, still intact on the ocean floor, still full of this dangerous fuel that could surface suddenly at any moment.

22347. By the time the truck and other equipment was finally recovered, nearly two years had passed. We are extremely lucky that this story does not have a much worse ending.

22348. Enbridge has gone to great lengths to ensure us that the risks are minimal and that top notch response programs will be in place in case anything does happen. But no matter how hard they may try to do everything in the safest possible way, they simply cannot predict all the variables at play, and I'm not even convinced that they would try that hard.

22349. In closing, I would like to talk about the issue of fossil fuel

**Oral statements**  
**Exposés oraux**

exploitation in general. The argument that we need to stop exploiting third world countries and take responsibility for producing energy in our own back yard is a strong one, but oil is a long way from our only option. Canada should be a world leader when it comes to developing alternative energy resources. We are so blessed to have some of the most intact wilderness left on the planet.

22350. People come from around the globe to get a glimpse of the incredible wilderness and wildlife that we have in this country and, quite frankly, I'm embarrassed that instead of developing alternative energy resources, we are focusing our attention and tax dollars on pumping oil out of the ground and selling it to foreign countries in its raw form as quickly as we possibly can.

22351. This is an extremely short-sighted endeavour and one that is certain to have devastating consequences. It's time for us to reduce our dependency on fossil fuels and look towards new cleaner technologies to meet our needs, but we'll never be able to do this if the government doesn't support it. This pipeline would not only be an enormous risk for British Columbia it would be a giant step backwards for Canada as a whole and a complete waste of our opportunity to be world leaders on this front.

22352. Thank you.

22353. **MEMBER MATTHEWS:** Ms. Squance, welcome. Please go ahead and do your presentation.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. MARIA SQUANCE:**

22354. **MS. MARIA SQUANCE:** Thank you. To begin, I would like to acknowledge that these hearings are on the traditional territory of the Esquimalt First Nation and the Coast Salish people.

22355. I'm speaking against approval of the Enbridge proposal. My interest in making this oral statement is threefold. I understand my wellbeing to be dependent on the natural world. I take it as given that risks to the health of the natural world risk the wellbeing of people.

22356. I am a mother, grandmother and retired teacher. I am concerned about the consequences of this proposal for future generations. I emigrated from Holland as a child after World War II. I know from my parents the value of democracy, particularly the ability to speak freely without fear of reprisal. Thus, I

**Oral statements**  
**Exposés oraux**

- very much value the opportunity to address this Joint Review Panel particularly because under Bill C-38 fewer projects will be evaluated with a narrower scope and diminished public participation.
22357. I do wish to register my disappointment at the decision to disallow a live audience to these hearings. Public witnessing of what is said is important to transparency and accountability. It plays an important part in increasing public understanding of all the issues, thus potentially decreasing polarization.
22358. I want to move into the essence of my concerns about the Enbridge proposal. First, I will address some specific issues regarding the risks and benefits to the people of B.C. and environment of B.C., and then the larger question of the public interest.
22359. The risks for British Columbia significantly outweigh the benefits socially, environmentally and economically. B.C. opposition leader, Adrian Dix, submitted to this hearing a compelling case for the economic benefits of the current use of land and water compared to proposed economic benefits of a pipeline which I will not repeat.
22360. The human costs to spills are high, particularly in renewable resource dependent communities. Dr. Ricky Ott, a marine toxicologist, who was also fishing in Cordova, Alaska at the time of the Exxon Valdez spill in 1989, writes of the chaos, death and despair which affected the community and its families.
22361. A 1996 American study conducted several years after the spill found severe chronic social and psychological impacts with stress levels equal to that caused by rape.
22362. Another point: A factor in determining the value of jobs created in building the pipeline may be the repeal of a 27 year old *Fair Wages and Hours of Labour Act* by Bill C-38. Workers in cross country projects, including First Nations projects and pipelines, who were previously guaranteed pay by the regional rate, usually 20 to \$30 per hour plus overtime can now be paid at each province's minimal wage, about \$10 an hour.
22363. Next I want to address the fanciful nature of Enbridge's assessment of risk and response capability, particularly the lack of reliable data. Experience with transporting and spilling dilbit suggests it may be more difficult to transport, more corrosive, more difficult and expensive to clean up, and more toxic than

- conventional crude.
22364.            However, few if any independent scientific studies have been done. The best evidence at present comes from the U.S. National Transportation Safety Board on the Kalamazoo spill which was initially ignored by Enbridge. The Enbridge claim of a once in more than 15,000 year risk of a major oil tanker spill is not well founded.
22365.            Elizabeth May has pointed out that Transport Canada's review, for example, did not specifically address the turbulence and navigationally challenging passages of the proposed route, neglecting altogether to mention the dangerous Hecate Strait.
22366.            As well, the risk of earthquakes and tsunamis does not appear to be taken fully into account. A 2009 study by geologist Robert Bruhn on activity on the Elution subduction zone concluded that Sumatra style events are not only possible, but likely. The particularly strong action of tsunamis on fjords and harbours such as Kitimat is widely recognized by geologists.
22367.            As well, the Enbridge claim of a six to 12-hour response time does not appear to have realistically taken into consideration the difficulty of navigating during earthquakes and tsunamis or extreme storms, which the British Columbia government projects to increase in frequency and severity due to climate change.
22368.            Reliably determining and monitoring the effects of an oil spill on marine ecology has become more difficult due to recent federal budget cuts. A Department of Fisheries and Oceans study on impacts and remediation measures of oil and gas leaks has ended, as well as DFO's marine mammal contaminants program. Oversight of marine pollution has been virtually eliminated.
22369.            To summarize, lack of data and selective use of available data make Enbridge claims of risk rates and risk management highly suspect. Add to that the Enbridge limited partnership structure, which accrues all profits to the company but limits spill liability to Gateway as a standalone company, it becomes clear that Enbridge is motivated to make claims in order to get approval but not to ensure the least possible risk in reality. The cost of miscalculating risks accrues to the public.
22370.            I now wish to make some comments on the question of the public interest.

22371. Mr. Harper and the Cabinet have the legal right to overturn recommendations from this Review Panel on the basis of what appears to be a narrow oil and gas based economics only driven definition of what they refer to as the national interest. I urge you to include in your report discussion and conclusions regarding the public interest based on a wider, longer-term concept of what benefits Canadians.

22372. In particular, three inter-related factors, climate change, availability of energy, and availability of fresh water will critically affect the well-being of future Canadians and their economies. All three are seriously compromised by the current rapid and incautious exploitation of finite oil and gas reserves.

22373. The urgency of dealing with climate change is widely recognized. Canada needs to plan now for an orderly transition to an environmentally sustainable, low fossil fuel economy.

22374. Two other issues related to current oil development, potentially or not, have bearing on the public interest of the pipeline and accompanying tar sands expansion. First is the reduced availability of reliable and valid information critical to making informed and rational decisions. Besides the laying off of first class scientists and the closing of research facilities, changes in Statistics Canada and attempts to prevent scientists from freely reporting their findings seriously hamper the free flow of information critical to a valid determination of public interest.

22375. Second, the public has diminishing opportunity to make their interests known and acted on. For example, trade and investment deals made without public scrutiny can override decisions made by democratically elected governments. In future resource project hearings, as mentioned earlier, public participation is circumscribed and the decision of this Joint Review Panel can be overturned.

22376. In spite of that, I urge you to hear the enormous concerns of so many who have presented to you and reject the Enbridge proposal.

22377. Thank you.

22378. **MEMBER BATEMAN:** Thank you, Ms. Squance.

22379. Mr. Sommerhalder, thank you for coming this evening to share your views with the Panel. Please proceed.

**--- ORAL STATEMENT BY/EXPOSÉ ORAL PAR MR. ROBERT SOMMERHALDER:**

22380. **MR. ROBERT SOMMERHALDER:** Thank you for allowing me to speak today. Just in case I don't make clear in my presentation, I am against this project.

22381. There are a number of questions that I have not been able to get answers to. What country will the pipe for the pipeline actually come from? Are there any price -- plans to produce the pipe here in Canada? There should be three, four billion dollars' worth of pipes in there.

22382. I had questions about exactly how the tethered tug plan would work, so I emailed the Northern Gateway Canada webpage last Friday, accepting Ms. Janet Holger's offer to join the conversation. I have yet to receive an answer.

22383. All I got was an automatic message telling me that it might take up to seven days to get an answer because of heavy workloads. I checked this afternoon; still nothing. Some conversation.

22384. So a Shell drilling oil -- Shell Oil drilling ship ran aground in Alaska last week. I'm sure you've heard about this from the speakers before. It was tethered to a tug. It didn't work too well.

22385. I think -- I'd also like to comment on the presence of the Canadian and B.C. flags in this room. Now, there are some art objects up there which I suppose are donated by the -- put there by the hotel, too. It looks like commercial native art. I don't see any -- what I don't see here is any evidence of a symbol of the First Nations on whose land the proposed pipeline will pass, where those most -- where those who will be the most affected by the pipeline, if it is built, and on whose traditional territories we are in fact, meeting.

22386. So maybe Mr. Matthews could consult with some of his Elders on what would be appropriate. I might suggest a talking stick, which is traditional, or maybe an eagle feather that is passed from speaker to speaker. This would be respectful of First Nations and a constant reminder to all at these hearings that the important to the First Nations of these hearings and the proposed pipelines.

22387. Almost every week I read about a mishap -- some large, some small. There are the well-known cases like the Queen of the North. The attention of those steering the ship cost the Concordia cruise ship in Italy recently -- apparently the captain's showing off, an experienced person steering. Exxon Valdez, captain drunk, apparently an experienced person steering that ship.
22388. There are many more, but one that you've probably not heard of is the Cosco Busan oil spill in San Francisco Bay in 2007. It reportedly spilled 53,000 U.S gallons of bunker fuel into the bay, San Francisco Bay, that is. No big spill as spills go, but everybody in San Francisco knows that there's a bridge across this Bay. Nevertheless, this ship struck the delta tower of the bridge in heavy fog.
22389. Now, the report of the National Transportation Safety Board of the United States blamed, and I read:
- "...the pilot's degraded cognitive performance due to use of prescription medications.*
- 2. Absence of comprehensive, pre-departure, master pilot exchange, ship master's ineffective oversight of pilot's performance and the vessel's progress."* (As read)
22390. Some other factors were bow lookout was at lunch rather than on duty. Fog horns on the bridge were silent despite heavy fog. Malfunction of the radar on the ship. Captain's incorrect identification of symbols on the electronic chart.
22391. Imagine my surprise when I opened the local newspaper yesterday to see that another ship, an oil tanker, had run into the San Francisco Bay Bridge just this Monday. This ship was registered in Majuro -- M-a-j-u-r-o. I'd never heard of this place, but apparently it is a small town in the Marshall Islands with a population of 3,000 persons. It seems to be a tourist resort, from what I could Google. In other words, this ship is operating under a flag of convenience.
22392. This made me wonder, why can't Enbridge oil -- or pipeline project be shipped in Canadian ships -- Canadian-owned ships with Canadian crews? Now, that would really create some jobs. I don't think there's anything in maritime law that says you cannot have Canadian crews on ships.
22393. By the way, according to today's press report, what I found this



- morning, the pilot of the ship, an American, in San Francisco was involved in three previous accidents.
22394.           So what does this example of the Cosco Busan in 2007 show us? Accidents are when a small number of mistakes come together to make a big mess.
22395.           My question is, how many incidents are there where, at the last minute because of dumb luck, a catastrophe is avoided? If you're driving a car, how many near misses do you have compared to the crashes or fender benders?
22396.           So I am certain that with shipping, the same can be said, only I'm sure that these near misses are not reported and everybody involved just gives a big sigh of relief.
22397.           If this pipeline project ever does get built, I think it is necessary to have independent monitoring of all operations, both pipeline and tankers. This would make certain that no one was taking dangerous shortcuts. It would help ensure that near misses are reported and whatever led to the situation is remedied.
22398.           Since the Canadian federal government is bowing out of many environmental and other oversight responsibilities, as we've heard before, it is time for private industry to step up. So my suggestion is that there be an independent corporation, or maybe more than one, run by groups made up of environmental organizations, First Nations, other interested parties would be the one Board of Directors, shareholders, so to speak. These corporations would be funded by Enbridge and their partners.
22399.           Their mandate would be to monitor operations and report on weaknesses and problems. It would have enough funding to hire topnotch experts in fields such as navigation, weather forecasting, pipeline safety or whatever they felt they needed.
22400.           The group would need free access to all operations, ships, pipelines, and to all company records of all the various companies and subsidiaries, and they would have to be legally protected in some way from threats, intimidation and frivolous lawsuits that would try to shut them up.
22401.           I will leave it to the Joint Review Panel and your lawyers to figure out how you could legally set up such corporations so that we can exercise effective

monitoring of both pipelines and shipping operations.

22402. Thank you.

22403. **THE CHAIRPERSON:** Thank you to all three of you for your oral statements this evening.

--- (A short pause/Courte pause)

22404. **THE CHAIRPERSON:** Good evening, Ms. Verhulst. You're a patient woman. Thank you very much. And please proceed with your oral statement.

--- **ORAL STATEMENT BY/EXPOSÉ ORAL PAR MS. GLENYS VERHULST:**

22405. **MS. GLENYS VERHULST:** Well, thank you, and thank you all, members of the Panel, for all the listening you're doing; not just this evening, but throughout the whole hearing. I recognize that you're doing a lot of listening, and I thank you for it.

22406. And I also want to thank Rob Fleming, who's the MLA for Victoria Swan Lake, for being here today. He's the Opposition Critic for the province, and he's also addressing the Panel next week in Vancouver, but he's here today, too.

22407. And thank you also to Enbridge representatives. I did not know that we would all be around the same table together today.

22408. As you may have guessed, I'm here because I'm opposed to the Enbridge pipeline. I have a brother who's working in the fishing industry on B.C.'s coast near Prince Rupert, and I worry to what might happen to his ability to make a living if something goes wrong with the proposed pipelines and tankers.

22409. My partner is from Terrace, and it's been so amazing for me to travel there and to see the beauty of Northern B.C. where the pipeline would travel. Her relatives live there and they love the outdoors, and they're opposed to the pipeline as well.

22410. And I'm troubled by the lack of respect that the federal government has shown to First Nations throughout this process. I'm a member of the United Church of Canada, and through the church's apology for its role in residential

**Oral statements**  
**Exposés oraux**

- schools I've been learning how essential it is for non-indigenous people to listen to and respect First Nations voices.
22411. We know that 150 -- sorry, 130 First Nations have expressed opposition to the pipeline along its route. The Coastal First Nations' declaration banning crude oil supertankers on the North Coast and the Save the Fraser Declaration banning tar sands through the Fraser River watershed couldn't be clearer in saying no. So I hope that the federal government will start listening.
22412. The federal government has stated that they believe this project is in our national interest, but I don't understand why they think so. It wouldn't create more jobs for British Columbians than would be at risk from fishing and tourism and other jobs in the event of an oil spill. It wouldn't contribute to our energy needs because the oil it would carry is for export.
22413. And Enbridge claims that they will contribute to government coffers, but how will government coffers look after clean-up expenses and economic losses following an oil spill? I doubt that Canada is going to come out ahead. And I know that's my personal opinion. We will have to see.
22414. I know that there are calculations that the Courts use to determine liability and compensation in the event of a disaster, but I really can't comprehend what Enbridge could possibly offer to compensate for the death of a river, the destruction of a coastline, the end of a salmon run, the pollution of the Great Bear Rainforest and the devastation of land which people love and to which they belong.
22415. Now, I was eight years old when the Exxon Valdez oil spill happened, and the pictures of the oil-covered beaches and the eagles and the otters and all of the other living things that were dead or dying seared themselves into my memory. At the time, I wondered how grown-ups could ever have let something so awful happen.
22416. And I'm an adult now, and I don't want another generation of children to be shocked by the pictures of a new oil spill on this coast and to ask why the adults let something so terrible happen again.
22417. So we can say no to this plan. We have other options.
22418. I work for a non-profit promoting energy efficiency in the province,

**Oral statements**  
**Exposés oraux**

and I believe that energy efficiency is an important source of new energy and new jobs in B.C. I believe that we, as Canadians, along with people around the world, are already transitioning to a more efficient and renewable energy future. And I believe we need to invest in that future, not in this dangerous proposal that puts so many good things at risk.

22419.           So I'm so glad that there is a very big "we" saying no to Enbridge, that so many people have come together in common cause, including First Nations, businesses, local governments and a huge number of people from all walks in B.C. who you've been hearing from.

22420.           So members of the Review Board, I ask you to not recommend approval of the Enbridge Northern Gateway pipeline.

22421.           Thank you.

22422.           **THE CHAIRPERSON:** Thank you.

22423.           That concludes this evening's session, and we will sit again tomorrow morning at 9:00.

22424.           Thank you, everyone. Good night.

--- Upon adjourning at 9:58 p.m./L'audience est adjournée à 21h58