The Six Bombs

How Kinder Morgan's *Trans Mountain* pipeline
and terminal expansion threatens
you,
your children,
and your children's children.

Children at Secret Beach by the Salish Sea

Written by Sarama, February 2016, while working to complete the film:
This Living Salish Sea

Map of the of the Salish Sea and surrounding basin
by Stefan Freland, University of Western Washington.

After leaving the Enron Corp., former Enron executives, Rich Kinder and William Morgan formed the Kinder Morgan company in 1997, which took over the liquid pipeline assets of Enron.

In 2005 Kinder Morgan (Canada) bought the Trans Mountain pipeline and became its 100% owner. So, I will mostly use, *Kinder Morgan,* the name of the parent company.

On Dec. 16, 2013 Trans Mt. filed an application to expand its facilities, to triple capacity. This pipeline expansion project will deliver a devastating barrage of toxic "bombs," exploding in slow motion through space-time, through the matrix of life, through unseen generations, globally, nationally, regionally, and with direct impacts, locally.

1. The first *bomb*: The Tar Sands extraction project is the single largest point source of green house gas emissions in Canada, and the single largest engineering/mining/ extractive project on the face of the earth. The Tar Sands are the size of England.

The Athabasca Tar Sands project is extreme dirty fossil fuel extraction. It is poisonous, enormous, deadly, and hellish beyond description. Just ask the First Nations people of Fort Chipewyan, who live downstream from this sacrifice zone of mines, processing plants, and tailings waste lakes, which are leaking toxins into the Athabasca River. These indigenous people are part of the "sacrifice zone" and are dying of cancers. These types of cancers are very rare in the rest of the Canadian population.

A Greenpeace aerial view of a typical scene of the Athabasca forest, in Northern Alberta, before tar sands mining/extraction, from the film *Petropolis,* by Peter Mettler.

Greenpeace aerial view of tar sands bitumen extraction, from the film, *Petropolis*, by Peter Mettler.

A Greenpeace aerial view of a tar sands processing plant, from the film, *Petropolis* by Peter Mettler.

The Healing Walk at the Tar Sands, in July, 2013.

An excerpt from an article in the *Earth Island Journal*: *Deformed Fish Found Downstream of Tar Sands Mines,* by Jason Mark, June 13, 2012

First Nations Communities Worried about their Health

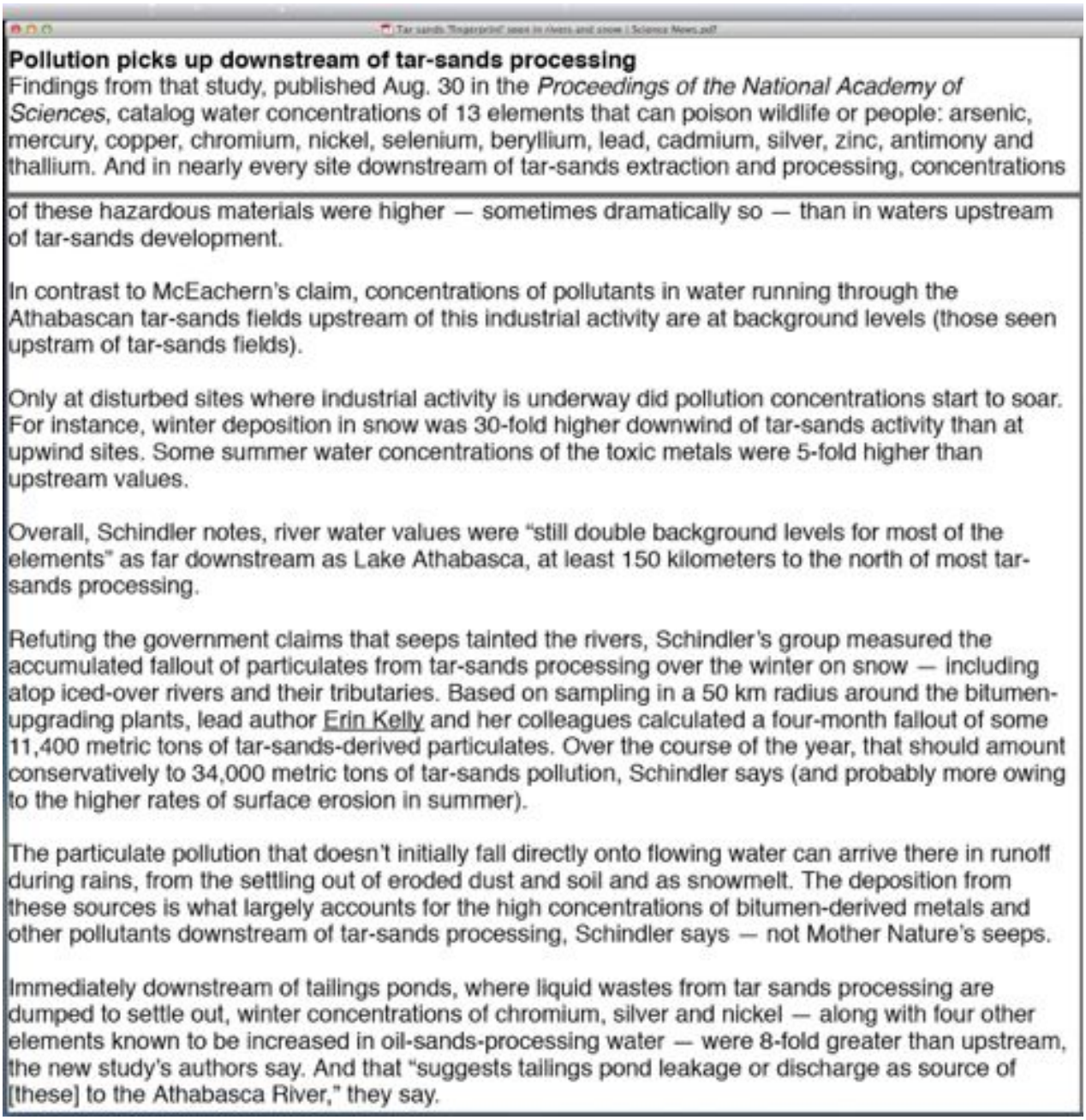
Chief Allan Adam, the head of the Fort Chipewyan community in the far north of Alberta, has been fishing in Lake Athabasca for all of his life. His father, now 76 years old, has been fishing there even longer. And neither of them has seen anything like what they pulled from the lake on May 30: two grotesquely deformed, lesion-covered fish.

When they caught the sickly fish, each taken from a different part of the lake, the two Indigenous men immediately figured that it had something to do with the massive tar sands oil mines that lie about 300 kilometers upstream along the Athabasca River. "We have been putting two and two together, and raising concerns about the fast pace of [tar sands] development," Chief Adam told me in a phone interview this week. "The tailing ponds are leaking and leaching into the rivers, and then going downstream to Lake Athabasca."

Here in the United States, public opposition to the tar sands has centered on the proposed Keystone XL pipeline: how it could jeopardize the fresh water supplies of the Ogallala Aquifer and how it would increase greenhouse gas emissions by keeping us locked into the petroleum infrastructure. For now, those worries remain hypotheticals. But for the people of Ft. Chipewyan — a community of about 1,200 that is only accessible by plane most of the year — the environmental impacts of the tar sands are already a lived reality. According to a 2009 study by the Alberta Cancer Board, the cancer rate in Ft. Chipewyan is higher than normal. Many of the residents there blame the industrial development south of them for the disproportionate cancer rates.

In this unretouched photo, taken in July, 2013, the Syncrude plants are several kilometres away, with a tailings waste “pond” in the foreground, as large as a lake. The air is foul, smells of polycyclic aromatic hydrocarbons and reduces visibility. It sounds like a war zone, with continuous cannon fire from floating platforms, to scare off migratory birds from landing on the toxic lakes.

An excerpt from the article: *Tar sands 'fingerprints' seen in rivers and snow,* in *Science News*, by Janet Raloff, Aug. 31, 2010.



Pollution picks up downstream of tar-sands processing

Findings from that study, published Aug. 30 in the *Proceedings of the National Academy of Sciences*, catalog water concentrations of 13 elements that can poison wildlife or people: arsenic, mercury, copper, chromium, nickel, selenium, beryllium, lead, cadmium, silver, zinc, antimony and thallium. And in nearly every site downstream of tar-sands extraction and processing, concentrations of these hazardous materials were higher — sometimes dramatically so — than in waters upstream of tar-sands development.

In contrast to McEachern's claim, concentrations of pollutants in water running through the Athabascan tar-sands fields upstream of this industrial activity are at background levels (those seen upstram of tar-sands fields).

Only at disturbed sites where industrial activity is underway did pollution concentrations start to soar. For instance, winter deposition in snow was 30-fold higher downwind of tar-sands activity than at upwind sites. Some summer water concentrations of the toxic metals were 5-fold higher than upstream values.

Overall, Schindler notes, river water values were "still double background levels for most of the elements" as far downstream as Lake Athabasca, at least 150 kilometers to the north of most tar-sands processing.

Refuting the government claims that seeps tainted the rivers, Schindler's group measured the accumulated fallout of particulates from tar-sands processing over the winter on snow — including atop iced-over rivers and their tributaries. Based on sampling in a 50 km radius around the bitumen-upgrading plants, lead author Erin Kelly and her colleagues calculated a four-month fallout of some 11,400 metric tons of tar-sands-derived particulates. Over the course of the year, that should amount conservatively to 34,000 metric tons of tar-sands pollution, Schindler says (and probably more owing to the higher rates of surface erosion in summer).

The particulate pollution that doesn't initially fall directly onto flowing water can arrive there in runoff during rains, from the settling out of eroded dust and soil and as snowmelt. The deposition from these sources is what largely accounts for the high concentrations of bitumen-derived metals and other pollutants downstream of tar-sands processing, Schindler says — not Mother Nature's seeps.

Immediately downstream of tailings ponds, where liquid wastes from tar sands processing are dumped to settle out, winter concentrations of chromium, silver and nickel — along with four other elements known to be increased in oil-sands-processing water — were 8-fold greater than upstream, the new study's authors say. And that "suggests tailings pond leakage or discharge as source of [these] to the Athabasca River," they say.

After nearly 16 years of health service at Fort Chipewyan, Dr. John O'Conner was fired, in April, 2015. Earlier, he had made the news when speaking out about the elevated cancer rate in Northern Alberta communities, believing them to be linked to tar sands activities.

Nunee Health Board Society

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Box 350, Fort Chipewyan, Alberta T0P 1B0
Phone (780) 697-3650
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Community Wellness
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Phone (780) 697-3703
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Isabel & Noel McKay Healing Centre
Box 476, Fort Chipewyan, Alberta T0P 1B0
Phone (780) 697-3900
Fax: (780) 697-3031

Dr John O'Connor
via email

Doctor O'Connor,

RE: Termination of Services to Nunee Health Board Society (NHBS)

Please be advised that Nunee Health Board Society no longer requires your professional services to provide any patient consultation or on call services to the staff at the Fort Chipewyan Health Centre.

In addition, you have no authority to speak to or represent the Nunee Health Board Society in any way to any other individual, party or entity

Please ensure you submit any outstanding invoices by April 30, 2015 for final compensation.

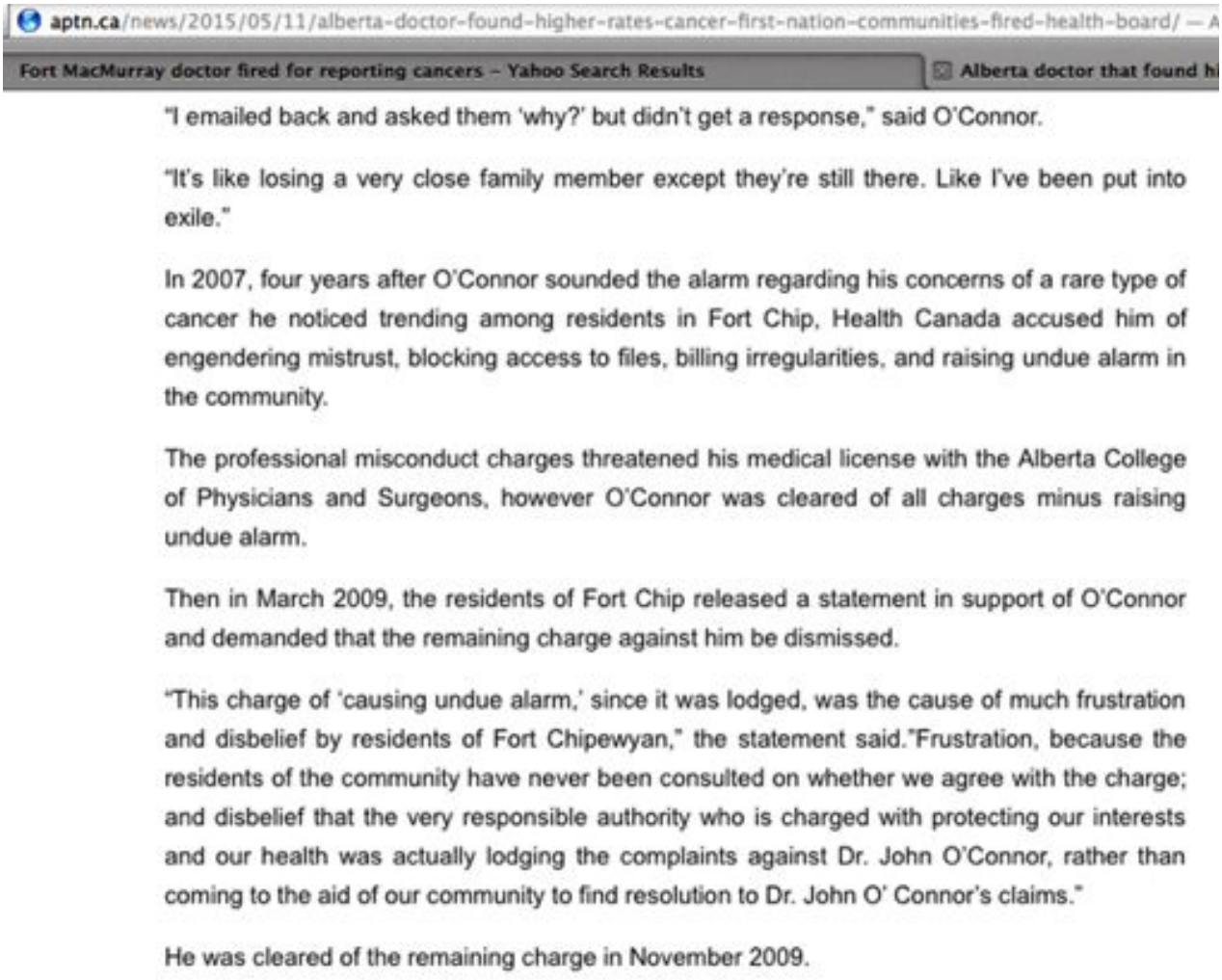
We wish you well in the future.

Regards,

Roxanne Marcel,
NHBS Chairperson,

Cc: Northern Lights Regional Hospital
Jessie St. Laurent, NHBS Nurse in charge
Dr. Richard Ibach, AHS North Zone

This is an excerpt from an article in the APTN National News, by Brandi Morin, May 11, 2015, regarding some of the circumstances of Dr. O'Conner's firing.



aptn.ca/news/2015/05/11/alberta-doctor-found-higher-rates-cancer-first-nation-communities-fired-health-board/

Fort MacMurray doctor fired for reporting cancers - Yahoo Search Results | Alberta doctor that found hi

"I emailed back and asked them 'why?' but didn't get a response," said O'Connor.

"It's like losing a very close family member except they're still there. Like I've been put into exile."

In 2007, four years after O'Connor sounded the alarm regarding his concerns of a rare type of cancer he noticed trending among residents in Fort Chip, Health Canada accused him of engendering mistrust, blocking access to files, billing irregularities, and raising undue alarm in the community.

The professional misconduct charges threatened his medical license with the Alberta College of Physicians and Surgeons, however O'Connor was cleared of all charges minus raising undue alarm.

Then in March 2009, the residents of Fort Chip released a statement in support of O'Connor and demanded that the remaining charge against him be dismissed.

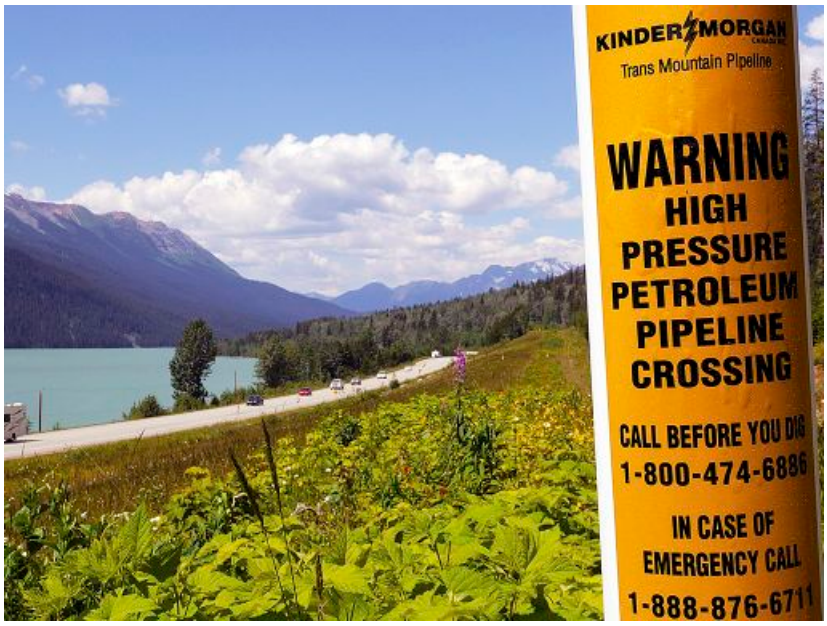
"This charge of 'causing undue alarm,' since it was lodged, was the cause of much frustration and disbelief by residents of Fort Chipewyan," the statement said."Frustration, because the residents of the community have never been consulted on whether we agree with the charge; and disbelief that the very responsible authority who is charged with protecting our interests and our health was actually lodging the complaints against Dr. John O'Connor, rather than coming to the aid of our community to find resolution to Dr. John O' Connor's claims."

He was cleared of the remaining charge in November 2009.

In the Harper era, firings, muzzling of science and scientists, covert surveillance and suppression of legitimate democratic public activities of First Nations people and concerned citizens who were active on environmental issues, including investigative auditing of environmental organizations by Revenue Canada, were all standard practice. This is just a brief summary of how corporate fossil fuel control and profit interests were elevated, while democracy was degraded.

The new Kinder Morgan pipeline, if built, will further tar sands extraction, to continue, and to grow. The legacy of tars sands extraction and bitumen burning will haunt future generations, long after we are gone.

2. The second *bomb*: A plan to build a new three-foot diameter pipeline, along a route corresponding roughly to the 1150 km route of the existing two-foot diameter pipeline, from Edmonton, Alberta, terminating at Burrard Inlet, B.C.



Jasper National Park, (and Kinder Morgan pipeline route).

The pipeline route follows along the Fraser and North Thompson Rivers.

Many pumping stations are along the route. The pipeline is just a few meters away, literally, from the rivers, at many points.

A pipeline rupture, could be devastating to the pristine wetlands and habitat along the pipeline route and could spell the death knell for salmon populations, which are already struggling from the impacts of climate change and open pen salmon farms. The Fraser River is arguably one of the most important, if not **the** most important salmon bearing river, in the world.

3. The third *bomb*: The Kinder Morgan oil tanks on Burnaby Mt., are termed a “tank farm” (unconscious irony?). The expansion plan would increase storage capacity to **five and one half million** barrels of volatile, toxic, and highly flammable and explosive diluted bitumen. This is in a densely populated urban area in close proximity to schools, homes, and Simon Fraser University, a major university campus, atop Burnaby Mt.


An aerial view of the present Kinder Morgan oil storage tanks, at centre, on Burnaby Mt.

John Clarke, Burnaby resident, holds a photo of a burning oil storage tank “farm”.

Shawn Soucy photo. In Burnaby, at 12:31 pm, July 24, 2007, a contractor ruptured the Kinder Morgan high pressure oil pipeline between Burnaby Mt. and the marine terminal. 11 homes were covered in oil, 250 residents were evacuated, 250,000 litres of oil were spilled into Burnaby Inlet, with 210,000 recovered. The clean up cost 15-17 million dollars.

The Transportation Safety Board of Canada report stated, in part, under “Findings as to Causes and Contributing Factors”: 4. **Inadequate communication within Kinder Morgan Canada Inc. (KMC) and between KMC, the consultant, and the contractor resulted in no common understanding or acceptance of the project work plan and the contractors construction schedule.**