B. C. TAP WATER ALLIANCE

Caring for, Monitoring, and Protecting British Columbia's Community Water Supply Sources Email – info@bctwa.org

Website – www.bctwa.org (Stop Fracking British Columbia – wwww.bctwa.org/FrackingBC.html)

NATURAL RESOURCES STANDING COMMITTEE PRESENTATION - FEBRUARY 3, 2011

Bonjour. Merci Beaucoup. Thank you for the opportunity to appear before this Committee.

My name is Will Koop. I am a researcher and author of numerous reports and a book concerned about the protection of public drinking water sources in British Columbia (see B.C. Tap Water Alliance website, <u>www.bctwa.org</u>). A year ago I created a website, *Stop Fracking British Columbia*, when I began to investigate energy corporations in northeast BC mining enormous volumes of fresh water to hydraulically fracture or "frack" deep shale gas deposits. Though water is a fundamental component of fracking, it is only one of numerous other environmental and social concerns.

BC's shale developments are far removed from where I live, an 18-hour vehicle journey from Vancouver just to get to the outer edge of the vast energy zones leased to the international energy companies. I visited the area twice, in May and September, 2010. As a result, I produced three reports that touch on some of the dynamics of these issues:

- June 17, 2010: *The World's Biggest Experimental Frack Job!!* (Apache Canada's 2010 operations in the Horn River Basin);
- October 13, 2010: 24-7 Less Peace in the Peace (Talisman Energy's operations north of Hudson's Hope);
- November 9, 2010: Encana's Cabin Not So Homey (the issue of cumulative effects).

In addition, I also produced two YouTube videos: *My Very First Frack*, and *The Komie Commotion*. Quebecers concerned about deep shale gas developments have translated my cumulative effects report and the videos into French on their website blogs.

Our provincial regulator, the BC Oil & Gas Commissioner, stated to this Committee on December 14, 2010, that the environmental and social consequences from deep shale gas developments in northeast BC are "responsible" and in order. *I'm here to tell you that they are not.*

For instance, in my report, *EnCana's Cabin Not So Homey*, I described how the *RUSH* to develop BC's non-renewable deep shale gas is occurring without cumulative environmental effects studies:

Northeast British Columbia's shale gas race will undoubtedly become and remain one of the most significant environmental and public planning issues facing First Nations, the Province, Regional Districts, regulators, communities and residents alike.

Given the backdrop of evermore lax and non-existent legislation and regulations, these developments can be understood as distinct social and political failures.

I included a quote from a 1986 Ministry of Environment report that aptly summarizes what the BC government has failed to undertake:

Strategic planning precedes the sale of petroleum rights. This ensures all parties involved are aware of the concerns and constraints associated with development in an area before development is proposed.

In 1991, the Ministry of Environment released a report urging the government to implement "cumulative effects" studies in the energy zone, which it failed to undertake. The concerns by Ministry staff continued about the absence of cumulative effects with the creation of the BC Oil and Gas Commission in 1997. In 2003, the Commission finally published a lengthy two volume report on how to *possibly* implement cumulative environment effects in northeast BC. However, the matter was ignored. Since 2003, the government leased thousands upon thousands of hectares of public lands to energy companies without conditions to conduct cumulative effects studies and without consulting the public.

When EnCana's representative Richard Dunn was asked by this Committee to comment on the state of cumulative effects studies in British Columbia, Mr. Dunn stated on November 23, 2010, that *"it would not make sense to do a cumulative effects assessment."* Mr. Dunn's response is not only an affirmation that cumulative effects studies have been ignored, but it is also a disturbing statement about the energy corporation's attitude and philosophy, including Mr. Dunn's comments about Canada being on the "forefront of environmental and economic stewardship." EnCana has significant lease areas and corporate partnerships throughout northeast BC, and elsewhere.

There was only one long-term cumulative environmental effects study in western Canada. It was conducted by Ernst Environmental Services of Pioneer Natural Resources Canada Inc.'s oil and gas operations in the Chinchaga area of BC and Alberta. Unfortunately, that ten year study was terminated after the company was acquired in November 2007 by Taqa North, a Saudi Arabia company owned by the Abu Dhabi National Energy Company PJSC, with deep shale gas leases in northeast BC. In 2005, Jessica Ernst, of Ernst Environmental Services, had her well water in Rosebud, Alberta contaminated with methane, ethane and other hydrocarbons after EnCana fractured the area for coalbed methane gas.

As Mr. Parfitt testified before this Committee on December 2, 2010, the cumulative effects issue is further complicated by the fact that the BC Oil and Gas Commission has provided little accurate or comprehensive data on public resource uses by energy companies, such as the water withdrawals list he referred to. This long list released by the BC Oil & Gas Commission regarding companies operating in the Horn River Basin, failed to provide accurate information, incorrectly suggesting that little water was needed for fracking operations from 2009-2010.

I wrote in my last report that EnCana had apparently conducted the world's largest fracking operation on multi-well pad 63-K in the Horn River basin next to Two Island Lake, doubling the resource figures by Apache Canada a half year earlier when it announced the world's largest frack operation a few kilometres away. I estimated that EnCana used about 1.8 million cubic metres of fresh water (over 700 Olympic swimming pools of water), about 78,000 tonnes of specially-mined frack sand (about 800 rail cars), and about 35,000 cubic metres of toxics, and that this operation might be a template or indication of many more operations in the future. The BC government does not mandate energy companies to publish this, and related, data, but ought to. EnCana's public relations officer in its Calgary headquarters later said to me in a telephone conversation that EnCana was concerned about the information in my report. I responded that I was only too happy to change the information if EnCana would provide me with its own final figures from pad 63-K. I then emailed a number of questions to EnCana (see attached), but have not received a response. As I read from this Committee's transcripts, EnCana promised to provide the Committee with the water and frack sand data on pad 63-K, but has yet to do so.

(Email sent to EnCana, Calgary Headquarters, 16/11/2010 1:22 PM.)

When I obtain the final information from you (EnCana) about 63-K pad (at Two Island Lake), I will then make the necessary changes to my recent report. The projected information in my report was based on an interview with a Trican rep. that confirmed information presented in Trican presentations.

Here are my immediate questions for 63-K pad:

1. Are all the completions for all 14 wells completed?

2. Is the total number of "314 fracs" correct, and if so, does this reflect the end of completions for 63-K.

3. Can you provide me with the data on how many completions were done per well.

4. Can you provide me with data describing the length of each horizontal bore.

5. How many days did all the completions take in total, beginning to end (if all the completions are completed).

6. I know from the OGC that information on 63K is generally registered as "confidential". Can EnCana provide me with the well completions data it provides to the OGC re total water volume, total frack sand, and total bulk chemical volume use for 63-K pad? Sincerely, Will Koop.

The absence of long-term, integrated strategic cumulative effects planning, the lack of accurate resource use data by the Oil and Gas Commission, and little governmental oversight or monitoring of the energy developments in northeast BC are not the only concerns. Many landowners who are directly affected by the energy developments have told me of their concerns, whereby they seem to have few rights and stakeholder privileges. They state that: high pressure toxic gas facilities should not be established so close to residences; air quality standards are deficient; there are few or no air monitoring alarm systems; water tables used for residents and agriculture are changing; that BC's Mining legislation gives priority to developers to access and develop private property. David Core with the Canadian Association of Energy and Pipeline Landowner Association provided the Committee with some of these concerns on November 25th.

The concerns that I have raised to this Committee about legislative and regulatory deficiencies and monitoring oversight in British Columbia are not isolated. In our submission to the National Energy Board in July, 2006 regarding Kinder Morgan's Anchor Loop Project

(http://www.bctwa.org/NEBSubmission-July10-06.pdf), I reported how the Alberta government failed to act on the recommendations of a special Committee appointed by Alberta's Executive Cabinet in 1972. That committee recommended that the tar sands *might be* developed over a 750 year period, not a 50 year period. The Alberta government suppressed the report until it was leaked 3 years later to Mel Hurtig, who then released the study. The special governmental committee headed by the Ministry of Environment understood the "*magnitude*" of environmental consequences from energy companies proposing to mine the tar sands. In that same report, the committee made strong statements concerned about multinational energy corporations and strong statements about Canada's energy security as it related to both protecting the environment and in providing long term energy supplies found in Canada for the long term use of Canadians. Thankyou, Merci.