



Scientists Concerned and Informed on the Environment Speak Out

An open letter to:

Mayor Monaghan, Councillors Empinado, Feldhoff, Germuth, Goffinet, Murphy, and Scott:

We write to express our concerns about the Northern Gateway, and export of diluted bitumen (dilbit) from Kitimat through the Douglas Channel. We are pleased that you have committed to a plebescite to determine voters preferences, but we are concerned that massive spending by the proponents will bias the outcome.

We believe the risks associated with this project far outweigh any short-term benefit for Kitimat, and that both the science and the economic benefits have been largely misrepresented by the industry and by the Federal Government. In 2012, the Canadian taxpayer benefit was about \$9 per "barrel of oil equivalent", less than one-fifth of Norway's per-barrel return rates in the same year.

Information obtained by CBC under access to information law found that the rate of overall pipeline incidents in Canada doubled between 2000 and 2011, with the highest incidence in BC. Such incidents are much more dangerous when the product in the pipe is "dilbit". It was diluted bitumen from the Bakken Oil Shale deposits which blew up in Lac Megantic – and had been misrepresented by the shippers as conventional crude oil.

The industry implies that all "crude oil" is essentially the same. This is untrue. There are three different products: conventional crude, synthetic crude, and dilbit. Synthetic crude oil – produced by "heavy oil upgraders" – approximates the characteristics of conventional light crude. However, such "upgraders" – actual refineries that extensively process the bitumen – are expensive, and the majority-foreign owners of the tar-sands are not building additional upgraders in Alberta, preferring to reap a larger value-add by shipping the raw product overseas, rather than refining it in Canada.

So dilbit, not synthetic crude, is to be shipped via Kitimat, and attempts to spin this as "just crude oil" are an outright misrepresentation by government and industry that does not pass the "truth in advertising" test. The industry attempts to hide the composition of "dilbit" as a "trade secret". Dilbit is known to regularly contain highly flammable and potentially carcinogenic compounds – basically whatever is cheapest diluent at the time – such as benzene, toluene, hexane, and the like.

The Embridge spill in the Kalamazoo in 2010 is an example of the problem of dilbit in and around waterways. A similar spill in the Kitimat watershed would destroy the livelihoods of a good portion of the citizenry and seriously impact property values, as happened in Kalamazoo. It would have serious externalized health impacts and costs, and the long term effects on wildlife and fish is immeasurable. In the challenging waters of Douglas inlet, the inevitable tanker incident will be catastrophic for Kitimat's economy. In an area not that far removed from the Exxon Valdez disaster, one would hope many politicians and citizens would understand this.

Finally, there is the question of responsible tar sands development. It has been estimated that to avoid runaway climate change, only 20% of known fossil fuel reserves can be exploited. If Canada were both charging market rates and upgrading in Alberta or BC, then only a small portion of the reserves would generate the same economic benefit within Canada. James Hansen, world renowned climate scientist put it this way: "If Canada proceeds {with planned extraction and pipelines}, and we do nothing, it will be game over for the climate."

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Signed:

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Scientists Concerned and Informed on the Environment Speak Out is a global multidisciplinary group of science-trained and experienced individuals who track threats to our environment, and the misconceptions and misrepresentations that often accompany those threats.