



Ontario Energy Board Energy East Consultation

Council of Canadians Written Submission, Part One of OEB Energy East Consultations

May 15, 2014

The Council of Canadians welcomes the opportunity presented by the Ontario Energy Board's (OEB) consultation to share our views on TransCanada's proposed Energy East pipeline. We firmly believe the Energy East pipeline presents many risks and little reward for Ontario, and the Ontario government should publicly oppose the proposal and instead focus on safer, more sustainable energy sources.

The Council of Canadians is one of Canada's leading progressive advocacy organizations with more than 100,000 grassroots supporters, including more than 40,000 in Ontario, and local volunteer chapters across the country. Through our campaigns we advocate for clean water, fair trade, sustainable energy, public health care, and a vibrant democracy.

Energy East – an export pipeline

Greater energy independence in Eastern Canada and strengthening the region's refinery sector has been suggested as important benefits of the Energy East pipeline project.ⁱ But Energy East is not about meeting Ontario's oil needs. It is also not about supplying Eastern Canada's oil needs. The pipeline will be used first and foremost to export oil – unrefined – from two new ports in Quebec and New Brunswick.

The recently released report *TransCanada's Energy East: An Export Pipeline, not for Domestic Gain*ⁱⁱ states that up to 1 million of the 1.1 million barrels of oil per day shipped through the Energy East pipeline would likely be exported unrefined. Existing supplies from Atlantic offshore oil and imports of cheap U.S. light crude, along with the crude that would flow through Enbridge's recently approved Line 9B Reversal, would fulfill almost all of the needs of the three refineries along Energy East's path. Recent public statements by representatives of Valero, one of the two Quebec refineries along the route, and Enbridge affirm that whatever is shipped through Energy East would have to move to markets beyond Quebec.ⁱⁱⁱ

Meanwhile, Ontario and other provinces along Energy East's route are being asked to take on significant risks.

The unacceptable risk of a diluted bitumen spill in Ontario waterways

Diluted bitumen, or "dilbit," is created by diluting the thick bitumen extracted from the tar sands with various toxic and explosive chemicals to make it thin enough to transport through a pipeline.

In July 2010, an Enbridge pipeline ruptured in Michigan, spilling 3.8 million litres of dilbit, which then entered the Kalamazoo River. Unlike conventional crude, some of the dilbit sank to the bottom of the river, catching the local response and the Environmental Protection Agency by surprise and making cleanup efforts far more difficult.^{iv} The dilbit that didn't sink floated close to 60 kilometres downstream. As of this spring – nearly four years later and after significant dredging – approximately 20 per cent of the dilbit remains at the bottom of the river.^v

This was the first major spill of dilbit into a waterway. Much of the limited information we have about how dilbit reacts in waterways comes from the Kalamazoo spill.

There is a significant lack of independent scientific data on the consequences of dilbit spills in water.^{vi} A recent Canadian federal report did confirm that dilbit, when mixed with sediment in salt water, forms “tar balls” and sinks.^{vii}

In Ontario, the Energy East pipeline route crosses two primary watersheds: the Nelson River and the Great Lakes/St. Lawrence watershed. According to TransCanada’s pre-application for Energy East filed with the National Energy Board (NEB), there are 41 “named” river crossings in the province.^{viii} A pipeline spill could pollute many important waterways and drinking water sources such as Trout Lake, Lake Nipissing, the Nipigon river system (which could contaminate Lake Superior) and the Rideau River. The remoteness of much of the pipeline’s path in Northern Ontario will make detecting and cleaning up a spill much more difficult.

More needs to be understood about the location of the pipeline on top of aquifers and the potential for contamination. For example, just outside of Ottawa, the pipeline crosses the Oxford aquifer, which supplies drinking water for more than 10,000 people in North Grenville.^{ix} This aquifer has been labelled as highly vulnerable to contamination by the Ontario government because the soil above it is mostly very thin and not able to absorb much. The rock under the soil has many holes and fractures that liquids – like an oil spill – could travel down to this drinking water source.

A dilbit spill in one of Ontario’s waterways could contaminate drinking water sources, pollute fishing waters, and put an end to recreational activities – all of which would have related negative economic impacts.

Despite the evidence of the unique consequences of a dilbit spill, related outstanding questions, and the difficulties with dilbit spill cleanup, the NEB does not have separate and specific regulations for transporting dilbit.

Astoundingly, TransCanada denies that dilbit sinks in water, referring to this statement as a “myth” in promotional material.^x This strongly suggests that the unique and environmentally devastating challenges of a dilbit spill are not being factored into the emergency response plans TransCanada is coordinating in preparation of filing its full application for the Energy East pipeline with the NEB.

Pipeline safety?

There is also the question of the extent to which shipping dilbit could increase the chance of a pipeline rupture. According to pipeline expert Richard Kuprewicz, converting a pipeline to carry a substance that it wasn’t originally built to carry, particularly dilbit, comes with risks:

Changing crude slates, especially running dilbit, can significantly increase pressure cycles that can accelerate crack growth. The various and changing compositions of dilbit, both the bitumen and/or the diluent, can significantly impact pressure cycles on a pipeline where crack risk is a bona fide threat. Accufacts believes that the movement of dilbit in pipelines at risk to cracking threats presents a higher potential to cause pipeline ruptures if not adequately managed.^{xi}

A study prepared by the National Petroleum Council for the U.S. Department of Energy also states “pipelines operating outside of their design parameters, such as those carrying commodities for which they were not initially designed, or high flow pipelines, are at the greatest risk of integrity issues in the future due to the nature of their operation.”^{xii}

The pipeline to be converted for the Energy East project is part of TransCanada’s Mainline system, which has seen a number of serious ruptures in recent years. Between 1991 and 2013 there were eight incidents in this series of pipelines including ruptures, explosions and fires. These incidents, which were largely the result of stress corrosion cracking, external corrosion, coating and welding failures, raise concerns about the safety of aging pipeline infrastructure.^{xiii} The 100-4 pipeline, which is slated for conversion, ruptured because of external stress corrosion cracking near Rapid City Manitoba in July 1995. The delayed response in shutting down the pipeline led to a second fire on a nearby pipeline – Line 100-3.^{xiv} In most of these ruptures, it was the general public or TransCanada personnel that alerted TransCanada that the incident had occurred, not leak detection systems.

More recently on January 25, 2014 there was a large rupture that sent flames 300 metres high on one of the Mainline pipelines outside of Otterburne, Manitoba. The rupture created a 10-foot deep crater and left 4,000 natural gas customers in the cold for several days. The cause is under investigation.

Climate implications of Energy East must be recognized

The Ontario government has shown leadership by taking responsibility for reducing climate change pollution. The province’s recent phase-out of coal has been recognized as the most effective climate policy in the country.^{xv} With the *Green Energy Act*, the province has shown leadership in supporting sustainable energy expansion. Particularly important has been the support shown for public and community-owned renewable energy projects and measures to support green manufacturing in Ontario.

The Energy East pipeline threatens to undo this progress. Preliminary analysis from Pembina Institute indicates the crude production needed to fill the Energy East pipeline would generate an additional 30 to 32 million tonnes of carbon emissions each year.^{xvi} This is the equivalent of adding more than seven million cars to Canada’s roads. It is enough pollution to wipe out the emission reductions from Ontario’s phase-out of coal.^{xvii}

Filling the Energy East pipeline would help spur 650,000 to 750,000 barrels per day of additional production from the tar sands. The tar sands, which are two to four times more carbon intensive to produce compared to conventional oil, are already Canada’s fastest growing source of greenhouse gas emissions. The Athabasca Chipewyan First Nation and Beaver Lake Cree Nation, located downstream from the tar sands, have experienced negative health, environmental and social impacts and have called for an end to further expansion based on their unique Treaty rights.

For all these reasons the Council of Canadians requests that the climate implications of the Energy East pipeline be added to the four areas of potential impact being focused on by the OEB Energy East consultation. We also strongly recommend that a clear message be sent to the federal government that climate change emissions are part of the equation when evaluating pipeline infrastructure.

Ontario becoming more reliant on fracked gas imports

In the spring of 2013, the NEB made an unprecedented ruling that TransCanada had no obligation to provide service to its natural gas customers other than any arising under contract. Accordingly, the NEB had no obligation to adjust its toll regime to prevent TransCanada from losing money as its customers fled the pipeline for fracked gas from the U.S.

This decision laid the groundwork for the proposal to convert part of TransCanada's Mainline natural gas pipeline system to carry crude oil. Since announced, a number of questions have been raised in the media about how the proposed conversion will impact Ontarians' natural gas supply and the cost of natural gas. The OEB is right to examine these questions as part of its Energy East consultation.

The Ziff Energy background report commissioned by the OEB recognizes the Energy East conversion will contribute to Ontario's growing dependence on fracked gas imports. The Council of Canadians has previously brought forward expert testimony to the OEB regarding the consequences of increased reliance on fracked gas imports.^{xviii}

This includes geoscientist David Hughes' evidence that fracked gas in the Marcellus shale is unlikely to be as abundant and inexpensive as commonly assumed.^{xix} It includes environmental consultant Lisa Sumi's summary of the myriad of regulations in play to address the significant environmental footprint of producing fracked gas in the Marcellus shale. These regulations will have consequences for both the cost and availability of the gas.^{xx} We also highlighted Anthony R. Ingraffea's research indicating that the "footprint for shale gas is greater than that for conventional gas or oil and for coal used for electricity generation when viewed on any time horizon, but particularly so over 20 years." Ingraffea is a professor of engineering at Cornell University.^{xxi}

We strongly encourage the OEB to direct Ziff Energy to also consider these implications in its final report.

Provincial leadership required

There is a lack of federal leadership when it comes to addressing climate change, protecting water and ensuring Canadians have access to needed energy.

Canada does not have a national strategy to address urgent water issues or an effective climate policy. There is no federal leadership to conserve and protect our water or a plan to ensure Canadians have access to the energy we need, while reducing our fossil fuel dependency. During a time of global water and climate crises, the federal water policy is 27 years old and badly outdated. There is yet to be any federal regulation of emissions of the oil and gas sector.

Meanwhile, the 2012 federal omnibudget bills gutted the *Fisheries Act*, removed protections from 99 per cent of lakes and rivers under the former *Navigable Waters Protection Act* and amended the *Canadian Environmental Assessment Act* to cancel 3,000 environmental assessments. At the request of industry, the changes to the *Navigable Waters Protection Act* specifically exempt pipelines from review under the act.

In the Spring 2012 Report of the Commissioner of the Environment and Sustainable Development to the House of Commons, Scott Vaughan warned, "the remaining budget for assessing the environmental and human health risks of sites has shrunk by more than 60 per cent, and so the capacity to identify new risks has dwindled."^{xxii}

These changes also significantly restrict people's ability to share their views with the NEB on infrastructure projects like Energy East. This is what makes the Ontario Energy Board's consultation particularly needed, and welcomed.

There are a number of lawsuits underway challenging the new rules restricting participation in the NEB^{xxiii} as well as the NEB's recommendations regarding Enbridge's proposed Northern Gateway pipeline.^{xxiv}

The NEB has also failed to consider a key implication of pipeline projects like Energy East in recent pipeline reviews – specifically, how this infrastructure contributes to climate change.^{xxv} In the case of Enbridge's Northern Gateway Pipeline Project, the NEB excluded the upstream impacts of production to fill the pipeline, implications for tar sands expansion, and the downstream impacts of burning the crude. The NEB's recent filing of the List of Issues to be considered for Energy East Pipeline Project^{xxvi} indicates climate change will again be ignored in the review.

It is in this context that provincial leadership is needed, now more than ever. Leadership that rejects projects like Energy East, which will send Canada further down the path of risking important waterways, fostering further expansion in the tar sands, and more climate emissions.

We commend the Energy Minister's commitment to represent Ontario's interests before the NEB, as well as the comprehensive consultation being undertaken by the OEB. Ultimately, we feel the scale of imminent threat presented by the Energy East pipeline, and the abdication of the Harper government of its duties, justifies Ontario's intervention based on these unacceptable risks. In order to represent Ontarians' interests, the Premier should speak publicly against the Energy East pipeline.

ⁱ TransCanada Corporation. "The Benefits of the Energy East Pipeline." <<http://www.energyeastpipeline.com/benefits/the-benefits/>>

ⁱⁱ The Council of Canadians et. al. *TransCanada's Energy East: An Export Pipeline, Not for Domestic Gain*. 18 Mar. 2014. <<http://www.canadians.org/publications/transcanada%E2%80%99s-energy-east-export-pipeline-not-domestic-gain>>

ⁱⁱⁱ McCarthy, Shawn. "Enbridge balks at claims Energy East pipeline boon for Quebec refineries." *The Globe and Mail*. 5 Mar. 2014. <<http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/enbridge-balks-at-claims-energy-east-pipeline-boon-for-quebec-refineries/article17311999/>>

^{iv} Frosch, Dan. "Amid Pipeline Debate, Two Costly Cleanups Forever Change Towns." *New York Times*. 10 Aug. 2013. <<http://www.nytimes.com/2013/08/11/us/amid-pipeline-debate-two-costly-cleanups-forever-change-towns.html>>

^v United States Environmental Protection Agency. "EPA's Response to the Enbridge Oil Spill." 4 Mar. 2014. <<http://www.epa.gov/enbridgespill/>>

^{vi} The Council of Canadians believes the Experimental Lakes Area in Ontario should be used to better understand the unique nature of these spills.

^{vii} Environment Canada Emergencies Science and Technology et. al. *Federal Government Technical Report on Properties, Composition and Marine Spill Behaviour, Fate and Transport of Two Diluted Bitumen Products from the Canadian Oil Sands*. 30 Nov. 2013. <https://www.ec.gc.ca/scitech/6A2D63E5-4137-440B-8BB3-E38ECED9B02F/1633_Dilbit%20Technical%20Report_e_v2%20FINAL-s.pdf>

^{viii} National Energy Board. "Energy East Pipeline Ltd. - Energy East Pipeline Project - Project Description (A59129)." <<https://docs.neb-one.gc.ca/ll-eng/llisapi.dll?func=ll&objid=2428790&objAction=browse&viewType=1>>

^{ix} http://www.mrsourcewater.ca/assessment_report/chapter9/MRSPR_HVAs.pdf

^x TransCanada Corporation. "Pipeline Particulars: About the Energy East Project." *Community Link*. 2.1. <<http://www.energyeastpipeline.com/wp-content/uploads/2014/03/Energy-East-Community-Link-Vol-2-Issue-1.pdf>>

^{xi} Accufacts Inc. *Report on Pipeline Safety for Enbridge's Line 9B Application to NEB*. 5 Aug. 2013)

^{xii} Cushman, John H. Jr. "Federal Rules Don't Control Pipeline Reversals Like Exxon's Burst Pegasus." *Inside Climate News*. 3 Apr. 2013. <<http://insideclimatenews.org/print/25033>>

^{xiii} Transportation Safety Board of Canada. *Pipeline Investigation Reports*. <<http://www.tsb.gc.ca/eng/rapports-reports/pipeline/index.asp>>

^{xiv} Transportation Safety Board of Canada. *Pipeline Investigation Report P95H0036*. <<http://www.tsb.gc.ca/eng/rapports-reports/pipeline/1995/p95h0036/p95h0036.asp>>

^{xv} Partington, P.J. "More Trouble with 2030." *Pembina Institute*. 15 Jan. 2014. <<http://www.pembina.org/blog/776>>

^{xvi} Demerse, Clare and Erin Flanagan. "Climate Implications of the Proposed Energy East Pipeline, A Preliminary Assessment." *Pembina Institute*. 6 Feb. 2014. <<http://www.pembina.org/pub/2519>>

^{xvii} Ibid.

^{xviii} Ontario Energy Board Proceedings. "EB-2012-0451: Enbridge Gas Distribution Inc." and "EB-2012-0433 and EB-2013-0074: Union Gas Limited."

^{xix} Hughes, J. David. *Shale Gas Supply to the Greater Toronto Area*. <<http://www.canadians.org/sites/default/files/publications/OEB%20Hughes.pdf>>

^{xx} Sumi, Lisa. *The Regulation of Shale Gas Development: State of Play*. 28 Jun. 2013. <<http://www.canadians.org/sites/default/files/publications/OEB%20Sumi.pdf>>

^{xxi} Ingraffea, Anthony R. *The Carbon Footprint of Shale Gas Development and the Remedial Measures Necessary to Address it*. 26 Jun. 2013. <<http://www.canadians.org/sites/default/files/publications/OEB%20Ingraffea.pdf>>

^{xxii} Vaughan, Scott. *Report of the Commissioner of the Environment and Sustainable Development to the House of Commons*. 8 May 2012. <http://www.oag-bvg.gc.ca/internet/docs/parl_cesd_201205_00_e.pdf>

^{xxiii} Das, Indra. "ForestEthics Advocacy Suing Harper Government Over National Energy Board Rules." *Desmog Blog*. 13 Aug. 2013. <<http://desmog.ca/2013/08/13/forestethics-advocacy-suing-harper-government-over-rules-restricting-citizens-participation-energy-dialogue>>

^{xxiv} More, Dene. "Northern Gateway Lawsuit: Enbridge Pipeline Block Sought by Environmentalists." *The Canadian Press*. 22 Jan. 2014. <http://www.huffingtonpost.ca/2014/01/17/northern-gateway-lawsuit_n_4619122.html>

^{xxv} West Coast Environmental Law. "The Joint Review Panel's decision on the scope of the environmental assessment for Enbridge Northern Gateway Pipelines." <http://wcel.org/sites/default/files/publications/West%20Coast%20-%20JRP%20Decision%20on%20Scope%20-%20Background_0.pdf>

^{xxvi} The Council of Canadians. "NEB accused of sabotaging approvals process with premature ruling." 16 Apr. 2014. <<http://www.canadians.org/media/neb-accused-sabotaging-approvals-process-premature-ruling>>