CUSP – Citizens United for a Sustainable Planet OEB Submission for Wednesday March 26^{th} , 2014

Please note: The presentation will highlight sections of this document in order to remain within the 5-10 minute timeline.

CUSP – Citizens United for a Sustainable Planet c/o Paul Berger 1181 Sunrise Beach Drive Shuniah, ON, P7A 0Z5 March 24th, 2014

Ontario Energy Board PO Box 2319 2300 Yonge Street Toronto, ON, M4P 1E4

Dear Members of the OEB,

CUSP is a grassroots group that has met regularly in Thunder Bay since April, 2012. CUSP was formed by a group of concerned citizens after the federal government withdrew Canada from the Kyoto Protocol. Our mission is to work on environmental issues (especially climate change), push for Canada to respect Indigenous rights, and advocate for social justice. We have no formal membership protocols. Seventy-six people are on the CUSP 'meetings' listserve and thus receive the CUSP monthly meeting agenda, meeting minutes, and other updates, and a further 70 people are on the CUSP 'events' listserve and receive information about events we feel to be important, such as the OEB Energy East community conversation.

CUSP believes that the Energy East proposal brings with it substantial risks, certain deleterious impacts, and no substantial benefits. We are aware that the NEB assessment process may disallow intervenors from speaking about the upstream impacts of the proposed pipeline conversion. Still, these are the most dangerous and we will outline them here. If the assessment process does disallow this discussion, we recommend that the OEB note that the process is flawed, and proceed to make a case against Energy East based on the certainty that the pipeline will leak.

It is certain that the pipeline will leak. The conversion would use the existing Eastern Mainline Gas Pipeline, built in the 1950s – the same vintage as Exxon's Pegasus pipeline that ruptured in 2013 in Mayflower, Arkansas, flooding homes with 7000 barrels of diluted bitumen. Similar to the proposed Energy East pipeline,

the Pegasus pipeline was carrying material for which it was not designed. According to the National Petroleum Council¹,

"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."

Between 2000 and 2011 the NEB recorded at least 1047 separate pipeline incidents². TransCanada Pipelines states that pipelines in Canada had a 99.9994% safety record between 2002 and 2011³. While they do not provide information as to how the figure should be interpreted, with 1.1 million barrels a day proposed to flow through Energy East every day, 660 barrels per day on average can be expected to be transported unsafely – a quarter of a million barrels per year.

This puts Northern Ontario watersheds at great risk, especially since the diluted bitumen cannot be cleaned up by conventional methods, as Enbridge's disastrous Kalamazoo spill in 2010 demonstrated. While pipeline companies in Canada are legally responsible for cleanup costs related to pipeline spills for which they are to blame, there is no way to adequately compensate people for loss of use or loss of tourism related to lengthy and incomplete cleanups, like in the Mayflower and Kalamazoo spills. For example, a spill into the Nipigon River would quickly move into the Lake Superior National Marine Conservation Area, contaminating prime speckled trout spawning grounds and the water supply for the town of Red Rock, Nipigon, and the Lake Helen First Nation. Cleanup would be next to impossible and would have serious deleterious impacts.

This scenario is not purely hypothetical. In 1990 a major landslide at the TransCanada pipeline crossing of the Nipigon River was caused in part by disturbance by the pipe itself⁴. It left the pipe hanging above the riverbank⁵.

An old pipe, carrying a product it was not designed for, at a high flow rate of 12.7 barrels per second, will leak. The result will be catastrophic.

The second reason that CUSP opposes the Energy East proposal is that much of the land traversed by the current and proposed new sections of the pipeline are Aboriginal territory. CUSP recommends that the OEB advocates against the proposal on principle since we can be certain that all Aboriginal Peoples whose land is

 $^{^{\}rm 1}$ 2011, p. 49, http://www.documentcloud.org/documents/676105-1-7-crude-oil-infrastructure-papernpc.html

² http://activehistory.ca/2013/11/tracking-canadas-history-of-oil-pipeline-spills/

³ http://www.energyeastpipeline.com/myth-vs-fact-the-truth-about-pipelines/ ⁴section 4.1.

https://archive.org/stream/NIPIGONRIVERDEVE00SNSN20236.ome/NIPIGONRIVERDEVE00SNSN20236_djvu.txt

⁵ http://canadians.org/blog/thunder-bay-chapter-defends-watersheds-lake-superiors-north-shore

affected will not be fully consulted and most Nations will not give free prior and informed consent⁶ to the project. The Supreme Court, in the *Delgamuukw* and *Haida Nation* decisions noted that full consent is required on "very serious issues."

A separate but related concern is that the territory of the Athabascan Chipewyan First Nation is being irreparably damaged by Tar Sands operations, and this damage will increase with Tar Sands expansions facilitated by the proposed pipeline. This includes expansion of the 176 km² of toxic tailing ponds², ponds which recent Federal Government research has shown are leaking³. It also involves removing more than a million tons of boreal forest and wetlands a day, and everything that lives there³. If we allow this project to proceed, we cannot absolve ourselves of responsibility for this damage.

The third reason CUSP opposes the Energy East project is because, at the very moment in history when climate change demands that we move rapidly away from our fossil fuel addiction, this project would move us much deeper into that addiction. Energy East is primarily about creating a pathway for Alberta Tar Sands dilbit to get to overseas markets, facilitating an expansion of the Tar Sands. Natural Resources Canada confirms the pipelines/expansion nexus:

"A July 2012 report from the Canadian Energy Research Institute also showed that the economic benefits from future oil sands production depends greatly on the building of new pipeline infrastructure" 10.

It is well known that the burning of fossil fuels is warming the planet, .8 °C so far since the beginning of the industrial revolution. The more frequent extreme weather that the world has been experiencing is one of the first symptoms of this. Extreme weather has been felt locally, including the Thunder Bay Flood in May 2012, the Duluth Flood in June 2012, the Wawa Flood in October 2012, and a bit further afield in the June 2013 Calgary Flood and July 2013 Toronto Flood. The damages have been staggering, with the Calgary Flood the costliest 'natural' disaster ever in Canada, costing insurers alone almost 2 billion dollars¹¹, with a total damage estimate of 6 billion dollars¹². Globally, disasters such as Typhoon Haiyan that hit the Philippines in November 2013 have created enormous human misery.

⁶ http://www.amnesty.ca/get-involved/lead-in-your-community/factsheet-on-indigenous-peoples-and-free-prior-and-informed

⁷ http://www.oilsandstoday.ca/topics/Tailings/Pages/default.aspx

 $^{^8\} http://www.cbc.ca/news/canada/edmonton/oilsands-study-confirms-tailings-found-ingroundwater-river-1.2545089$

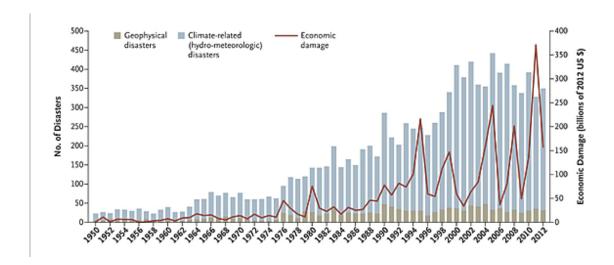
⁹ see Tar Sands, Andrew Nikiforuk, p. 75.

¹⁰ section 2.7, http://www.nrcan.gc.ca/energy/infrastructure/5893#h-4

¹¹ http://www.torontosun.com/2014/01/20/bad-weather-cost-canadian-insurers-32b-in-2013

 $^{^{12}} http://www.calgaryherald.com/news/Province+boosts+cost+Alberta+floods+billion/8952392/story.html\\$

While geophysical disasters like earthquakes have stayed relatively constant, the graph below 13 shows the rapid increase in climate-related disasters over the past decades and the enormous attendant economic costs. While pipeline and fossil fuel companies stand to gain from building pipelines and increasing bitumen production in the Tar Sands, Ontarians and other humans will pay the costs of climate-related natural disasters. The pipeline and Tar Sands expansion are incompatible with a stable climate as they lock us in to a future of increasing CO_2 emissions.



Unfortunately, the extreme weather we've seen is only the beginning. Without sharp reductions in global CO_2 emissions we risk an acceleration of warming and the triggering of slow feedback mechanisms such as methane release from permafrost that will lead to catastrophic warming of $3-4\,^{\circ}C^{14}$. At just a $1.6\,^{\circ}C$ increase in global temperatures the IPCC predicts 9% - 31% of species will be committed to extinction, while with a $2.9\,^{\circ}C$ rise 21% - 52% will be committed to extinction 15 . Sea level rise of 9 m is expected at $2\,^{\circ}C$ warming, while $3\,^{\circ}C$ warming will bring 15-25 m higher seas 16 .

Building energy infrastructure that locks us into expanding the Alberta Tar Sands – the most energy-intensive fossil fuel on the planet – is incompatible with tackling climate change and returning Earth to a stable climate. Retired leading NASA climate scientist James Hansen et al. argue that to stabilize climate at a $1\,^{\circ}$ C rise with $350\,^{\circ}$ ppm CO_2 in the atmosphere by 2100 we must reduce fossil fuel consumption by 6%/year starting immediately 17 .

¹³ Image from EM-DAT International Disaster Database, Center for Research on Epidemiology of Disasters, University of Louvain, retrieved from http://www.accuweather.com/en/weather-blogs/climatechange/steady-increase-in-climate-rel/19974069

¹⁴ http://www.plosone.org/article/info:doi/10.1371/journal.pone.0081648

¹⁵ http://www.plosone.org/article/info:doi/10.1371/journal.pone.0081648

¹⁶ http://www.plosone.org/article/info:doi/10.1371/journal.pone.0081648

¹⁷ http://www.plosone.org/article/info:doi/10.1371/journal.pone.0081648

Another way to look at the amount of fossil fuel humans can burn and possibly still stay safe is provided by $350.\text{org}^{18}$. We can burn 565 more gigatons of CO_2 and probably stay within 2 $^{\text{O}}\text{C}$ of warming. Fossil fuel companies, however, have 2795 gigatons in proven reserves. For the livability and survivability of the planet for our children, grandchildren, and descendants, much of that fossil fuel must stay in the ground.

From a planetary perspective, melting and 'washing' bitumen out of sand is indefensible. The Tar Sands produce more CO_2 than Jamaica or Rwanda¹⁹. The Pembina Institute has calculated the Energy East pipeline would result in an additional 30 to 32 megatons of CO_2 per year²⁰. From 55 megatons of CO_2 per year in CO_2 per

Ontario is one of only a few provinces that have taken actions aimed at significantly reducing greenhouse gas emissions. Through its support of feed-in tariffs for renewable energy and the phasing out of coal-fired generating stations, Ontario has been single-handedly responsible for cutting more CO_2 than any other province. The Nanticoke Generating Station's eight units alone produced over 17 megatons of CO_2 per year before being decommissioned²³.

It would be tragic if Ontario did not oppose Energy East. The gains made in cutting greenhouse gas emissions in Ontario will quickly be lost to the Tar Sands expansion facilitated by this project. Ontarians and other humans will pay the costs. Future generations will wonder why we made such a bad decision when we knew the consequences.

These, in brief, are the reasons CUSP opposes the proposed Energy East pipeline. We call on the OEB to recommend rejection of the project to the Ontario Government and to speak strongly against it at the NEB hearings.

Sincerely.

Paul Berger

Paul Berger For CUSP

¹⁸ http://math.350.org/

¹⁹ see Tar Sands, Andrew Nikiforuk, p. 133.

²⁰ http://www.pembina.org/pub/2519

²¹ http://www.oilsandstoday.ca/topics/ghgemissions/Pages/default.aspx

²² http://www.huffingtonpost.ca/2014/01/14/oil-sands-emissions-alberta_n_4598004.html

²³ http://en.wikipedia.org/wiki/Nanticoke_Generating_Station