



**ONTARIO
RIVERS
ALLIANCE**

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Swerhun Inc.
720 Bathurst St., Suite 500B
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By email: EnergyEast@swerhun.com
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Dear Sirs:

Re: Energy East Pipeline – Discussion Guide Submission

Ontario Rivers Alliance (ORA) is a Not-for-Profit grassroots organization acting as a voice for the French River Delta Association, CPAWS-Ottawa Valley, Kiishik Community Association, Food & Water First, Whitewater Ontario, Vermilion River Stewardship, Friends of Grassy River, Mississippi Riverwatchers, French River Stewardship, as well as many other stewardships, associations, and private and First Nations citizens who have come together to protect, conserve and restore healthy river ecosystems all across Ontario.

TransCanada is proposing to build the Energy East Pipeline which would carry tar sands oil in the form of DilBit or crude oil, from Alberta to New Brunswick. This would entail converting 3,000 kilometres (km) of existing natural gas pipeline in Saskatchewan, Manitoba and Ontario, and building over 1,500 km of new pipeline through Quebec and New Brunswick.

I am writing on behalf of ORA in response to my attendance at the Ontario Energy Board (OEB) public consultation meeting, held on 2 April 2014, in North Bay.

ORA offers the following comments for your consideration.

ORA's Position and Concerns:

ORA is opposed to the Energy East Pipeline for the following reasons:

1. Risk vs Benefit:

This pipeline would carry up to "1.1 million barrels of tar sands oil per day"¹ across numerous lakes, rivers, streams, wetlands, aquifers and watersheds to reach the East coast, where TransCanada has secured "20-year commitments for 900,000 barrels per day of firm service from prospective shippers." "TransCanada said the pipeline could eventually open new export markets for Alberta's heavy oil along the U.S. Eastern

¹ Volume 1, Energy East Project Description, P-1-1



seaboard, the Gulf Coast, in Europe and potentially as far as India's west coast, home to Reliance Industries Ltd.'s 1.24-million bpd Jamnagar plant."² Therefore, most of the 1.1 million barrels per day is destined for foreign markets and would do little to quench our local oil requirements. This pipeline could drive up domestic oil prices, and would carry minimal benefits, but could inflict high environmental, socioeconomic, and public health and safety risks to thousands of Canadians. It would however provide major financial gains for TransCanada. The imbalance of risks to benefits is unacceptable.

2. An Aging Pipeline would carry Corrosive DilBit:

The current aging pipeline was designed to carry natural gas, not the high-pressured flow of corrosive and diluted bitumen or "DilBit".³ This poses a special risk as noted in a study that showed that "pipelines operating in the range of 130°F to 159°F were nearly 24 times more likely to leak due to external corrosion and six times more likely to leak from any cause than pipelines operating under 70°F".⁴ This would reduce the integrity of the pipeline and increase the risk of disastrous spills and accidents. TransCanada provides no details in the Project Description regarding operating temperature, or what would be mixed with the tar sand oil in order to transport it through the pipeline.

3. Leaks and Spills:

Pipelines can fail for reasons ranging from a backhoe inadvertently striking one, to the slow but steady weakening from corrosion. It's not a matter of if, but when. Any amount of spilled DilBit could devastate the natural environment, fisheries, habitat, public health, livelihoods, quality of life, endangered species, aquatic ecosystems, and would have the potential to remove a sole or primary drinking water source and means of making a living from thousands of people along its route.

In 2009 this same natural gas pipeline ruptured and exploded near Englehart,⁵ and the worst spill ever was in 2011, when the new first phase of TransCanada's Keystone pipeline spilled 14 times in its first year of operation, spilling 21,000 gallons of tar sands oil and toxic chemicals in North Dakota.⁶ These spills included an incident where a leak under pressure created a 60 foot high crude oil geyser.⁷ In fact, a close look at pipeline incident data from states in the northern Midwest U.S., which have seen the greatest volumes of tar sands diluted bitumen over the longest time period, is quite alarming. Pipelines in North Dakota, Minnesota, Wisconsin and Michigan have spilled 3.6 times as much crude per mile than the national average between 2010 and 2012.⁸

Once tar sands bitumen, which is diluted with a mixture of very light petrochemicals for ease of transport, is spilled into a water body, the light petrochemicals - including toxins such as benzene and toluene - gas off, leaving the heavy bitumen to sink to the bottom. This is described in a report regarding the Enbridge tar sands spill in Kalamazoo, Michigan, where significant heavy crude sank below the water's surface and traveled along the river bed, making clean-up especially challenging.⁹

² Financial Post, August 1, 2013 – [TransCanada to proceed with 'nation-building Energy East pipelines between Alberta, New Brunswick](#)

³ Scientific American, [Does Tar Sand Oil Increase the Risk of Pipeline Spills?](#)

⁴ California State Fire Marshalls, [Pipeline Risk Assessment](#), 1993. Pg. 68

⁵ TransCanada, [Pipeline Investigation Report P09H0074](#)

⁶ Bold Nebraska, [TransCanada Pipeline – Map of leaks and spills](#)

⁷ WDAY News, [Crews clean up spilled oil in southeastern North Dakota](#)

⁸ Pipeline and Hazardous Safety Materials Administration (PHMSA), [Data and Statistics, Crude pipelines 2010-2012](#)

⁹ Inside Climate News, [Cleanup of 2010 Mich. Dilbit Spill Aims to Stop Spread of Submerged Oil](#)



If any of the above spill scenarios were to happen in Northern Ontario, or anywhere within the Canadian Shield, it would be particularly disastrous as dredging for clean-up would be extremely difficult, if not impossible.

4. Leak Detection:

The potential for disaster could be complicated even further by the fact that the Energy East line would be buried underground, where "pin hole" leaks could go undetected for days. Keystone XL would have to be spilling more than 12,000 barrels a day -- or 1.5 percent of its 830,000 barrel capacity - before its currently planned internal spill-detection systems would trigger an alarm.¹⁰ Ontario winters and ice covered rivers would make detection and clean-up of leaks most likely impossible.

5. A Lack of Confidence:

In 2012, Evan Vokes, a professional materials engineer and employee of TransCanada reported on the poor quality of pipeline construction and testified to the US State Department that TransCanada was using substandard welding practices. His concerns triggered a National Energy Board (NEB) investigation which confirmed Vokes' testimony. In concluding its investigation, the NEB stated it was "*concerned by TransCanada's non-compliance with NEB regulations, as well as its own internal management systems and procedures.*"¹¹ This lack of attention to detail and irresponsible behavior undermines all confidence in TransCanada's promises.

6. Gutting of Federal Environmental Protection:

The federal government has gutted most of Canada's effective environmental protection laws, which has shattered our confidence in any promises or decisions being made by it, and has effectively limited the ability of Ontarians to have any meaningful say or protect their interests.

7. Gutting of Provincial Environmental Protection:

The Ontario government has already demonstrated that energy and jobs come first through its streamlining and gutting of environmental protection, monitoring and compliance regulations and staffing. Poor government oversight means higher risks to the environment and public health and safety.

8. Will Not Take No For An Answer:

The fact that Prime Minister Harper has already announced to the world that he "*will not take no for an answer*" on the Keystone XL pipeline, demonstrates that his government will stop at nothing to ensure the pipelines are approved. This is an empty and unfair process that breaches our constitutional and democratic rights.

9. Global Warming:

The energy east pipeline if approved would triple the size of the Alberta tar sands within the next few decades, and they already make a huge contribution to global warming and pollution. This is unacceptable.

10. Lack of Details:

ORA is extremely concerned about the lack of specific detail regarding this proposed project.

¹⁰ Bloomberg, [Keystone XL Pipe Shuns Sensors to Detect Leaks](#)

¹¹ National Energy Board, [TransCanada Pipelines Ltd. \(TransCanada or the Company\) Compliance with Technical Standards](#)



Priority Impacts and Considerations:

Our list of priorities are:

1. The protection of public health and safety.
2. Extreme care and precautionary measures are exercised wherever any freshwater systems, drinking water sources, parks or protected areas are crossed by the pipeline.
3. The urgent need to reduce greenhouse gas emissions and slow global warming by reducing tar sands development.
4. The Ontario Ministry of the Environment (MOE) must also be required to provide a report to the Ministry of Energy, and have meaningful input into all environmental considerations and decisions. It is unacceptable that MOE was not even included in this review process, when it should have been the primary Ministry conducting the review.
5. Full technical and environmental details of what the project would entail.
6. A risk/cost benefit analysis be undertaken to determine the environmental, economic and social costs that could be incurred by entire communities that rely on potentially impacted freshwater systems for their drinking water source, as well as the damage to ecosystem services, habit and food sources, should a catastrophic spill occur.
7. Leading edge leak detection technology, including infrared sensors and fiber-optic cables, and acoustic sensors that can identify the sound of oil seeping from a pinhole-sized opening.
8. Full disclosure, transparency and accountability must be one of this government's highest priorities.
9. Independent third party review must be mandatory throughout every phase of the process.
10. TransCanada must be required, in the application phase, to indicate specifically how it would carry out emergency response and decommissioning, and make emergency response provisions similar to that required under the Ontario Mining Act Closure Plan.
11. TransCanada's application and commitments must specifically demonstrate its ability and willingness to assume responsibility for any and all damage it incurs to private and public property, and must immediately provide clean and healthy drinking water to all those impacted until the source water and any environmental damage is restored to 100% of its original state.

ORA is also opposed to crude oil being transported by rail or any other means, especially in light of the tanker train that derailed and exploded in the middle of the small town of Lac-Mégantic, Quebec, causing 47 deaths and hundreds of millions of dollars in damages in what was the continent's deadliest rail disaster in two decades. TSB Chief Investigator, Donald Ross,



reported "*the lower flashpoint of the crude oil explains in part why it ignited so quickly.*"¹² The volatile nature of transporting this volatile "crude oil" to market by any means places an unacceptable risk to human life.

Environmental resources have huge value both in and of their own right, and because of the broad range of benefits that we and future generations would receive from the ecosystem services. When the full value of the environment is considered, rather than just the part that can easily be measured in monetary terms, responsible governments tend to approve very different types of development projects.

This rush to export dirty tar sands oil may not make good economic sense for Canadians when we consider the risks of environmental degradation and loss of crucial fresh water resources that provide so many ecosystem services to communities across the Country. If a spill should occur, the average citizens of this country would not be any richer; but instead would be left with impossible cleanups and reclamation work, as well as the vital loss of clean drinking water that many communities rely on.

ORA requests that the proposed Energy East Pipeline project be evaluated by the provincial and federal governments using the United Nations Ecosystem Services Economics¹³ approach to explicitly incorporate the valuation of ecosystem services and the multiplicity of their services as a pivotal component of their decision making process.

Thank you for this opportunity to comment.

Respectfully,

Linda Heron
Chair, Ontario Rivers Alliance

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¹² Reuters Canada – [Fuel on train in Quebec disaster more explosive than labeled](#)

¹³ United Nations – Ecosystem Services Economics - [Approach](#)