



Rideau Environmental Action League P.O. Box 1061, Smiths Falls, ON K7A 5A5 REALaction.ca

May 14, 2014

Ms Rosemarie Leclair
Chair and Chief Executive Officer
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms Leclair;

Re: Energy East Pipeline Proposal

The Rideau Environmental Action League (REAL) submits the following to Phase I of the OEB's Consultation on Implications for Ontario of TransCanada PipeLines Limited Energy East Project.

REAL is a 25-year-old non-profit environmental organization based in the town of Smiths Falls and serving the broader community of Lanark, and Leeds and Grenville counties.

REAL has a long and credible history of delivering programs in partnership with municipalities, businesses and individuals that help municipalities and our residents take practical actions to protect our local environment.

For a small organization based in a small town and rural area, it has many accomplishments. It operates the now regionally famous REAL Deal Reuse Store that diverts 35 tonnes a year of good waste from landfill. It was one of the first of a handful of organizations in Canada to pioneer the EnerGuide for Houses in the late 90s, and has continuously delivered home energy audits since.

More specifically, REAL was a creator of what would become the very successful, long running, and highly respected Ontario-wide Well Aware program, addressing our common groundwater, rural wells and septic systems. REAL has delivered many other water protection programs, and, for the past three years, has delivered an

extensive private well monitoring program for six solar farm sites developed by one of the large solar companies, Recurrent Energy, and for the Township of Drummond / North Elmsley.

It is from this long and credible history of taking action to protect the environment of our region that REAL submits its concerns. REAL also recommends that the OEB expand its scope to address specific concerns in Eastern Ontario that arise from the effects of climate change on the region, and from the shipping of crude oil by rail.

IMPACTS ON PIPELINE SAFETY AND THE NATURAL ENVIRONMENT IN ONTARIO

WATER

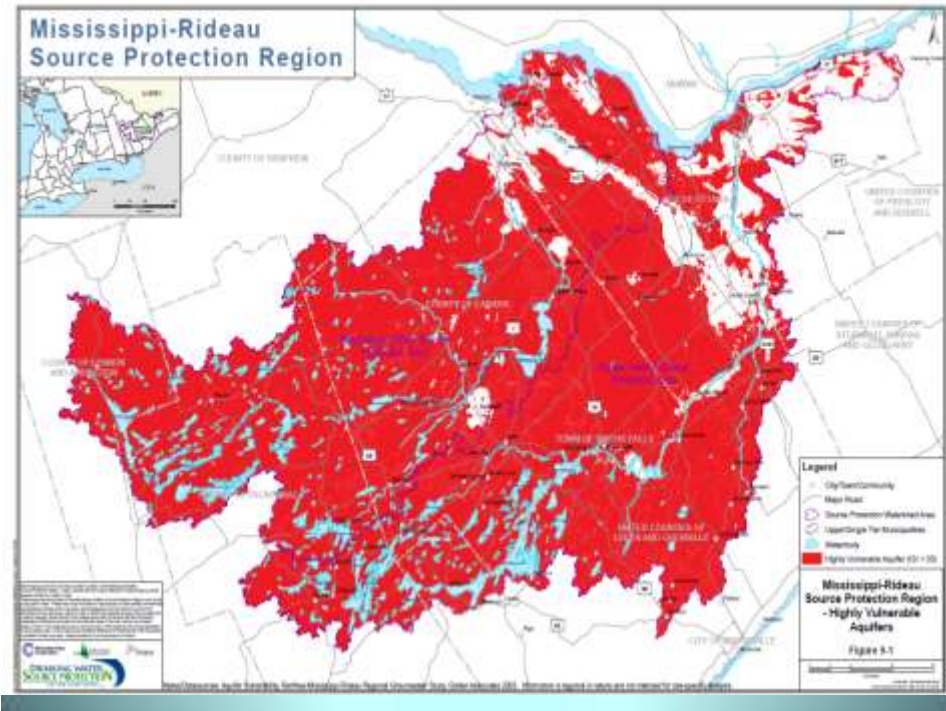
Eastern Ontario is one of the few regions left in North America with a healthy and balanced water system. Groundwater studies for Lanark, and Leeds and Grenville counties show that 90% of the region is *Highly Vulnerable* for groundwater contamination because of the shallow overburden and fractured bedrock of the area.

We know what this means, as this area is home to the largest trichloroethylene plume in Canada. Trichloroethylene, a carcinogen, is heavier than water, so goes to the bottom of aquifers. We now know that diluted bitumen sinks in water, it does not float. The experience with the trichloroethylene plume is that it is 11 km x 3 km, it is impossible to remove or clean up, and this plume affected some 250 homes, an elementary school and a municipal building. They must use special filters permanently, and even then the carcinogenic effects are not fully mitigated as the water is used for non-potable purposes.

Based on the history of pipeline spills, the likelihood of a spill from the Energy East pipeline is absolute – it will happen at some point. The history of spills from rail shipments is worse. The region of Eastern Ontario that both the pipeline and the rail line pass through cannot accept these risks to our water.

In Ontario, under Reg. 903 of the Clean Water Act, rural dwellers, who make up approximately half the population of rural Eastern Ontario, are 100% responsible for their own water supply, for their wells and the safety of those wells. A dilbit spill would forever contaminate groundwaters and make those rural properties unviable.

This map shows, in red, the *High Vulnerability* of our whole region to groundwater contamination from the surface, making both the shipping of dilbit by pipeline through the eastern side of the region, and shipping of crude oil and diluents by rail through Perth, Smiths Falls, Merrickville and Kemptville, unacceptable risks to the residents, the water and the environment of our region.



As well, REAL is equally concerned about the effects on surface waters from a spill of dilbit either from the pipeline or the train cars. The proposed pipeline would cross both the Mississippi and Rideau rivers in our region, both of which provide drinking water, and both of which are of economic, historic and cultural importance to the region. The unique Rideau Canal is a UNESCO World Heritage Site and is the only canal dating from the great North American canal-building era of the early 19th century that remains operational along its original line with most of its original structures intact.

TRAINS

Smiths Falls is a railroad hub, and has a large railroad yard in its centre, bigger than that of Lac Megantic. As well, the main rail line runs through the towns of Perth, Smiths Falls, Merrickville and Kemptville and the rural and farming areas in between.

REAL has two concerns related to the rail:

- 1.) Residents have noticed a huge increase in rail tanker cars on the lines and in the yard. As identified by the code 1267 on the rail car sides, these cars contain Petroleum Crude Oil (assume to be either tar sands oil, or Bakkan Shale oil). This increased traffic poses safety and environmental threats. Smiths Falls has recently requested it be put on the new federal registry from CANUTEC, the Canadian Transport Emergency Centre, but REAL is concerned that even with this listing, the First Responders and the municipal governments in the area will only know of the contents of the tanker cars after the fact. Our municipalities, and our First Responders, will be the ones initially tasked with dealing with any spill or explosion. Past experience does not bode

well. There have been two derailments in the yard in Smiths Falls in the past few years that the municipal government was not informed of.

The normal process for municipal governments to engage upper levels of government in Emergency Planning requirements and changes is through the annual review of those plans. REAL recommends to the OEB that it engages municipalities about those plans in advance of its deadline for submission to the NEB.

While rails fall under the jurisdiction of the federal government, REAL recommends that Ontario ensure that mechanisms are in place to inform municipal governments of shipments of tar sands crude and/or Bakkan oil through their jurisdictions at the time of, and that First Responders are appropriately trained, equipped, funded and serviced.

2.) After the dilbit is delivered to the refineries in Quebec and on the East Coast, REAL understands that the plan is to remove the toxic and flammable diluents, and return them, by train, to Alberta for reuse. This will add yet more safety and environmental hazards to this region that so far don't seem to be addressed. The same concerns raised above apply to this plan.

As there is no intention to stop or diminish shipment by rail of crude oil should a pipeline be in place, these threats from rail shipment to this region's water supplies would continue.

CLIMATE CHANGE

Oilsands production is Canada's fastest-growing source of the GHG pollution that causes climate change. As stated in the Pembina Institute's February 2014 report, *Climate Implications of the Proposed Energy East Pipeline*: "According to Environment Canada, oilsands GHG emissions are projected to nearly triple between 2005 and 2020, an increase large enough to cancel out all emission reductions that other parts of Canada's economy are projected to make over the same period". Increasing production of bitumen will only increase greenhouse gases and the rate of climate change. This is not acceptable, neither locally nor globally.

The citizens of Eastern Ontario are already observing the effects of increased GHGs and climate change. And they have experienced the effects of "climate disruption" in the Ice Storm of 1998, at the time the most costly weather-related disaster in Canada.

Two recent presentations by two of Canada's leading climate scientists serve to highlight the effects that Eastern Ontario residents will experience from further climate disruption as a consequence of the GHGs that have already been emitted.

Dr. Gordon McBean, Aug. 6, 2013:

By 2050, in contrast to the period 1961-1990

- Southern Canadian temps will warm by 3.5 degrees
- There will be 4-6 times the number of hot days, going from for e.g. 10 to 60
- There will be a 50% increase in the number of freezing rain events of more than 4 hours, and an increase of just about 80% in those of more than 6 hours, in Eastern Ontario
- There will be about twice as many heavy summer storms (with resulting flooding and winds)

Dr. Jim Bruce, Apr. 12, 2014

- Temps will increase from averages of 4 to 5 degrees C in the winter and 2.5 to 4 degrees C in the summer.
- Freezing rain events will increase by 2/3 by 2050 in Eastern Ontario
- Expect more heavy rains when it rains - an increase of 50% heavy rains in Eastern Ontario
- 2/3 of water borne disease outbreaks occur right after a heavy rain
- With heavier rains, and heavier runoff, more nutrients flooding lakes, more blue green algae blooms. Sharbot Lake has already experienced a bloom.

THE IMPACTS ON ONTARIO NATURAL GAS CONSUMERS

Much of the current supply of natural gas into Eastern Canada, and most of the estimated future medium-term supply, is and will come from fracked gas wells in the eastern United States. REAL is concerned because fracking can contaminate groundwater supplies, making them unusable. In due course, our region could come under pressure to give up or sell some of its valuable water to regions where groundwater supplies have become unusable.

Yours sincerely,

The Board of Directors of the Rideau Environmental Action League
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and
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