November 5, 2019

The Honourable Gordon Wilson, Minister of Environment

Dear Minister,

I am writing in response to Northern Pulp's Focus Report for a proposed Replacement Effluent Treatment Facility. I am responding to this extensive report with special consideration taken through a Physicians lens. I am a Child and Adolescent Psychiatrist, living 10 minutes drive from Pictou Landing First Nations Community.

In regards to the Effluent Cooling statement "cooling towers will generate naturally occurring Legionella Bacteria". A direct quote from the Review of the 2017 European Technical Guidelines for the Prevention, Control and Investigation, of Infections caused by Legionella Species states "Community acquired outbreaks of Legionnaires disease are most commonly associated with aerosols generated by evaporative cooling towers. Wet cooling towers and evaporative condensers are used for comfort cooling in commercial buildings, hotels, etc. and for cooling industrial processes." The case fatality for acquired community cases is 10%. Who will monitor for Legionella outbreaks and check or clean the water towers to prevent such outbreaks?

More questions regarding the effluent;

- 1. Whys was the Nitrogen parameter increased to 6mg/l as (daily maximum) from 3mg/l recommended maximum?
- 2. COD Chemical Oxygen Demand is very confusing play on words as should be reduced, not increased beyond limits
- 3. Sulphur 24H allowable is 14 and the proposed emission states 64.5?
- 4. Ammonia 24H allowable is 100 and the proposed emission is 406?
- 5. Chloroform 24H allowable is 1, and the proposed emission is 2.55?
- 6. Dioxins and Furans .013?

Why is it permissible to exceed the allowable limits?

There are decades of data that bring us to what is considered safe guidelines for pollutants. I believe our guidelines will tighten up in the very near future as we find

causative link to disease. Evidence based medicine continues to move forward at a rapid pace. Northern Pulp has not been able to meet pollution guidelines over the past several years. Exceeding the weak guidelines by enormous amounts with minimal fines, and reckless abandon. There has been a purposeful lack of monitoring for pollutants. Why would our community feel safe with any promises of monitoring the effluent, with such an abysmal history?

Canso Chemical on this site is responsible for 10-15 tons of mercury spills (1973-1975). (Montreal Gazette archives) Mercury levels at Abercrombie Point are above the National Guidelines. Elemental mercury is found 8meters below the surface and 3meters below the water table. (The News June 6 2019). Professor Tony Walker from Dalhousie University remarks these collections are from isolated wells and may not be an accurate number of total mercury. "If you wanted to look more where the mercury may or may not be then there are techniques used to do it". Mercury is moving toward Pictou Harbour, so why are we not using these techniques to monitor as it is a marine environment and fishing area? Mercury in the water table is toxic to humans and aquatic life.

We have had Minamata Disease (mercury poisoning) diagnosed in Ontario, at Grassy Narrows and White Dog First Nations communities after Dryden Pulp and Paper spilled 10 tons of mercury into their river.

Why is there a lack of transparency to where the mercury is and how it is moving into Pictou Harbour? We all are at risk.

If any of the contaminated soil is moved by contractors on this site of the new proposed effluent treatment facility, mercury levels in the water will increase significantly. Why are we tempting fate?

Northern Pulp may see this as a tight document. I am a Physician and can see no evidence based studies on negative environmental impact.

A third party environmental scientist not paid by Northern Pulp, would poke many holes in this document and in fact would raise many questions and legitimate fears.

In summary: There are no clear negative human health, environment, and aquatic life impact statements. No scientific substantiated studies. We cannot wait for the proposed treatment facility to start up and then count casualties. This is a serious threat to our health and environment and there is no turning back.

Please support us, 50 years of environmental racism is shameful and it is time to resolve this issue. No more extensions, peoples health and high quality standards of environmental protection should be our goal. We have to live with Industry, We do not have to live with industry that pollutes.

Respectfully Submitted,

John Krawczyk, MD

Urna Semper